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THE

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A MONTHLY JOURNAL

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U. OGDEN, M.D., - - - - EDITOR.
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TORONTO, JANUARY, 1879.

ANNUS MEDICUS, 1878.

In the last half-century of the years we number backwards from that one of grace whose remote descendant, 1878, has just been gathered to his fathers, the immortal Virgil wrote :—

"Redit labor actus in orbem,
Atque in se sua per vestigia volvitur annus."

But, the gods be praised, this is not true of the history of science in this nineteenth century, and each *annus medicus* has features and accomplishments all its own, which stamp its individuality, while the sole family likeness and evidence of germanity amongst them all is the bright star of progress which glitters on the brow of each. "*Truditur dies die, novæque pergunt interire lunæ*," said Virgil's fellow-countryman and coeval bard, the quick-witted Horace, and this remark is even truer of our day than his, for now so many things demand accomplishment in the short space of a diurnal revolution, and it is expected of each day to bring forth so much, that time can scarcely be afforded for the registration of what is past. In accordance with our usual custom, we purpose here, upon the threshold of the in-coming year, to review, as summarily and rapidly as possible, the items of our indebtedness to the year that is dead. We shall "a round, unvarnished tale deliver," premising that the exigencies of space compel us to confine ourselves to a bare record of the facts, dispensing with all ornate embellishment and any effort at presenting them in a pleasing or attractive form, thus seeking, as is the object of this journal, "rather use than fame." A convenient starting-point we shall, no doubt, find in the tripod basis of the science—

ANATOMY, PHYSIOLOGY, AND CHEMISTRY.

The grey nucleus in the floor of the fourth ventricle, underneath the eminentia teres, has heretofore been considered the common nucleus of the facial and abducens nerves. Dr. W. R. Gowers, as the result of a pathological experiment recently observed, believes that it is certain that the grey substance of the nucleus belongs to the abducens nerve, and that the facialis fibres pass through it simply, but originate probably at the same place as the other fibres passing along the genu facialis. Stilling states that the opinion hitherto held, that the fibres of the optic tract have no connection with the crus cerebri, is incorrect; on the other hand, he finds that a rather considerable part of these fibres arises from a large nucleus situated in the lower crus, which is laid open only when there is nothing to be seen of the substantia nigra in the section. Nicati details an experiment demonstrating the fact that the optic decussation is incomplete in the cat. In consequence of the analogies existing between the chiasm of the cat and that of man, he believes that this fact holds good in the case of the latter also. MM. Franck and Pitres, as a result of their recent investigations, confirm the conclusion, arrived at from pathological study, that the white fibres which start from the excitable regions of the convolutions and connect them with the central parts of the brain, are grouped in distinct bundles, which preserve their functional independence throughout their course in the white matter. Vulpian's late researches go to indicate the great probability of the origin of the chorda tympani from the fifth nerve. M. Luys points out that the projection of the paracentral lobule

from the regular curved line of the brain surface enables the brain of man to be distinguished from that of woman, in which it does not do so. Pierret, of Lyons, has demonstrated the constant relations existing between the volume of the motor and sensory cells of the nervous centres and the length of tract over which incitations emanating from, or returning to, them have to traverse. Luchsinger's late experiments satisfactorily prove that there exists not only a general centre for muscular movements, for the vaso-motor and sweat nerves in the medulla oblongata, but that minor centres are also dispersed throughout the entire length of the cord; that these centres can act independently after division of the cord, and that they are excitable by the same agents as the centre in the medulla oblongata. M. Ranvier announces that the nerves terminate in the smooth, as in the striped, muscles in a more or less arborescent expansion of the axis-cylinder. Recent researches of Vulpian appear to authorise the admission that the nerve fibres acting as dilators of the pupil come directly from the brain, mixed probably with fibres from such of the cranial nerves as have connection with the ophthalmic ganglion. Ranvier, Helmholtz, and Stirling have found that muscle will respond to a stimulus of less than 0·00005 second's duration. MM. Livan and Cazeneuve, as a result of some sixty experiments, have determined that the normal epithelium of the bladder absorbs nothing; but when injured, the mucous membrane may become absorbent. Marc Sée has shown by measurement that the united calibres of the bronchi are equal to that of the trachea, and the calibres of the bronchioles equal to that of the bronchi from which they spring. Hence the respiratory tube is a cylinder, and not a cone. Lautenbach, of Philadelphia, as a result of recent experiments, has reached the conclusion that, beside the respiratory centre, or centres, in the medulla oblongata, there exist in the spinal cord nervous mechanisms which may keep up the respiratory movements after destruction of the former. M. Cyon has arrived at the conclusion that the semicircular canals are the peripheral organs of the sense of space. Paul Bert, at the *Académie des Sciences*, announced that the carbonic acid in the blood must be in a state of combination; for when the alkalies are saturated, and the gas appears in excess, in simple solution, death rapidly ensues. M. Laborde has determined that the embryonic heart is set in motion, and enters on its functions, when scarcely formed. By the twenty-sixth hour of incubation (and perhaps sooner), the pulsation of the cardiac tube may be recognised. The heart alone, amongst the organs in process of formation, functionates as it is being developed. V. Mering has made a series of experiments, the result of which substantiates neither Pavy's statement, that muscular exertion and dyspnœa increase the sugar in the blood, nor that of Bernard, that sugar quickly disappeared from the blood. He establishes that the absorption of sugar is effected by the veins. M. Richet has at length positively determined the nature of the gastric juice to be a chlorhydrate of leucine. Dr. Robert Battey, of Georgia, has shown that the entire alimentary canal is permeable by enemata, and that the ileo-cæcal valve does not prevent the passage of fluid from the colon into the cæcum, if sufficient pressure be employed. Heidenhain has shown, in his recent researches on the salivary secretion, that there is strong reason to believe that the secretion of the watery portion and salts, on the one hand, and of the organic material, on the other, are independent of one another and under the control of two different sets of nerves—the secretory and trophic. J. Bermann, from a series of researches, has determined that the submaxillary gland contains, besides the ordinary acinous glandular tissue, an intercalated tubular gland, the ducts of which are much contorted and intertwined. They have an epithelium peculiar to themselves, and empty into Wharton's duct. MM. Afanassiew and Pawlow have demonstrated that sensory irritation of the skin is capable of inhibiting the secretion of the pancreas. As a contribution to the physiology of sleep, A. Strumpell records (Pfluger's *Archiv*) the case of a patient, aged 16, who was shut off by anæsthesia from all external impressions save through the left eye and the right ear; when these were closed, he at once fell asleep. Dr. Oertel, of Munich, has described a process of

laryngostroboscopy, by means of which the actual vibrations of the vocal cords during the production of sounds, which have hitherto eluded observation, can readily be seen. Raoul Pictet, of Geneva, has succeeded in obtaining the liquefaction of oxygen under a pressure of 320 atmospheres and at a temperature of 140 degrees below zero. He has also obtained the solidification of hydrogen under a pressure of 650 atmospheres and at a temperature of 370 degrees below zero. In this department, bookmakers and publishers have not been idle, as the following bibliographical list will show :— Allen's System of Human Anatomy, Bock's Atlas of Human Anatomy, new edition of Ellis' Demonstrations of Anatomy, Ewart's Manual of Practical Anatomy, Part VII. of Rickman Godlee's Atlas of Human Anatomy, fifth edition of Holden's Human Osteology, Chiene's Lectures on Surgical Anatomy, Hensman's Anatomical Outlines, Bell and Lankester's Translation of Gegenbauer's Elements of Comparative Anatomy, second edition of Gamgee's Translation of the sixth edition of Hermann's Elements of Human Physiology, McKendrick's Outlines of Physiology in its Relations to Man, Sylvester Marsh on Section Cutting and Mounting, a new edition of Beale on the Microscope in Medicine, Martin's Manual of Microscopic Mounting, Vol. II. of Roscoe and Schorlemmer's Treatise on Chemistry, Witthaus on the Essentials of Chemistry, Tidy's Handbook of Modern Chemistry, Wheeler's Organic Chemistry, Kingzett on Animal Chemistry, Blyth's Manual of Practical Chemistry, seventh edition of Bowmann's Practical Chemistry, Paul's Industrial Chemistry, based on Payen's work ; Semple's Aids to Chemistry, Classen's Quantitative Analysis, and Purvell's Observations on some of the Operations of Chemical Analysis.

MATERIA MEDICA AND THERAPEUTICS.

The progress of this department is steady and encouraging. Although the year is not so remarkable as its predecessors for the introduction of new remedies, yet the proving of the old, and the discovery of new applications for them encourages us to press forward in the field of therapeutics. Salicylic acid and its salts continue to maintain their reputation pretty fairly as antipyretics and antirheumatics. But "*ubi virtus, ibi virus*," and further experience, admonishes us not to omit our care and watchfulness in their administration. Besides the occasional occurrence of a toxic and irritant effect, Buch has found salicylic acid to be locally injurious to the teeth. Köpler has found that taken internally it loses its antiseptic properties by combination with an alkali. Bunz reports its beneficial employment in the intermittent and remittent forms of yellow fever. Laburthe reports good effects from silphium (6 to 20 drops 3 times a-day) in phthisis. Prof. Baelz, of Tokio, Japan, has had remarkable success in the recent epidemic of cholera from the hypodermic injection of 3 grain doses of paracotoin. Cloëtta and Fronmüller have found the coto bark and its alkaloids—cotoin and paracotoin—specially valuable in immoderate diarrhœa and sweating. Dr. Franz Mossman regards the chloride of pilocarpine (jaborandi) as an oxytocic, and reports two cases of its employment in this way. Fehling advocates it as a successful remedy in puerperal eclampsia. Its sialogogue and diaphoretic effects have been well established, and a good many cases of its successful employment for the removal of chronic pleuritic and ascitic effusions have been recorded. Dr. Ortille, of Lille, reports two cases of obstinate hiccough cured by its administration ; but its chief use will probably be found in kidney affections with suppression of urine. Dr. Henry, of Manchester, recommends the hypodermic use of pilocarpine (gr. $\frac{1}{3}$–$\frac{1}{2}$) wherever jaborandi is indicated, as being less apt to disagree and being easily controlled by nitrite of amyl inhalations. Dr. Ralfe, of the Seamen's Hospital, Dr. Saunders, and several other writers, during the year, have recommended nitrite of amyl for cutting short the cold stage of ague ; its great utility in epilepsy and hysteria ; in asthma, both spasmodic and renal, in angio-tetanic megrim, in chloroform and ether narcosis, and its antidotal effects upon the unpleasant symptoms produced by jaborandi, combine to render it one of the most valuable medicinal agents we possess. Dr. W. S. Forbes, of Philadelphia, records two cases of hydrophobia in which it afforded marked relief.

Iodoform has come into general use, and admirably serves a variety of purposes. Its pungent odour is the great drawback to its use, but this can be mitigated in various ways, and a combination with tannic acid almost entirely removes it. Its great solubility in ether renders its application in the form of spray both easy and convenient. Dr. Moleschott recommends iodoform in glandular swellings, cold abscesses, serous effusions, orchitis, and epididymitis. He paints iodoformed collodion over the parts. Mr. Berkeley Hill speaks most highly of its utility in syphilitic ulceration, and specially of the tongue. He uses it, both externally and internally, in the form of a pill ($\frac{1}{2}$ grain, with extract of gentian, 3 times a day). Wyndham Cottle, of the Blackfriars Skin Hospital, recommends it in venereal sores, buboes, chronic ulcers and as a parasiticide in chloasma and tinea. Amongst specialists, Prosser James recommends it in ulcerations of the throat; Dr. Edward Woakes and Lennox Browne highly laud it in nasal, post-nasal, and aural catarrhs, and Patterson Cassells regards it of use in diseases of the ear wherever there is ulceration. Dr. Fordyce Grinnell, of the Witchita Agency, has found tincture of iodine in 10 drop doses, in sweetened water, as efficacious as quinine in malarial diseases; and several contributors to the American journals have fully confirmed its value. M. Germain Sèe, who created such a stir in the therapeutic world by his early advocacy of salicylic acid, again startled the conservative portion of the profession by the announcement that asthma was no longer to trouble humanity, as he had found an infallible remedy in the iodide of potash and the iodide of ethyl. The latter merely relieves the paroxysm, but the former, sufficiently long continued, cures the disease. This is, of course, but the revival of an old remedy, but under the advocacy of so eminent an authority, it demands the careful and serious attention of the profession. Winternitz and Byrom Bramwell also lend it the support of their great authority. Delboeuf found that persons affected with colour blindness (Daltonism) were relieved of their infirmity on looking through a solution of fuchsine. Javal has turned this to account by interposing a thin layer of gelatine, coloured with fuchsine, between two glasses, which are to be worn as spectacles by Daltonians. Feltz and Bouchut have successfully treated albuminuriæ by fuchsine and rosaniline, in pill form, in doses of three grains *per diem*. Alexis Horvath, of Kieff, has shown that alcohol is a local anæsthetic, and that it is a useful application in severe burns. Guttmann and Fraenkel, in their experiments with peroxide of hydrogen, have found that it is capable of entirely preventing the decomposition of urine. The fermentation of grape sugar may also be prevented by it. Stöhr found that unhealthy sores were greatly benefitted by its application, and that soft chancres healed in half the time and were rendered incapable of inoculation. The diphtheritic secretion was similarly affected. Its internal administration, however, is lethal. Mr. Benj. Bell, of Edinburgh, speaks highly of the tincture of eucalyptus in bronchitis and in various stomach affections. One drop of oil of eucalyptus on cotton wool has proved an excellent anæsthetic to sensitive dentine, and it is also one of the most satisfactory agents for disguising the unpleasant flavour of cod-liver oil. Several contributors to the *Lancet* and *British Medical Journal* have recorded cases of the successful employment of subcutaneous injections of curara in chorea. Four-tenths of a grain appears to have been an effective dose. No further reports of its happy use in hydrophobia have been recorded. Wharton Sinkler reports favourably on the use of cannabis indica in epilepsy. Mr. Thos. Clark speaks highly of the oxalate of cerium in chronic cough. A. R. Finck, of Philadelphia, recommends oil of amber in arginose affections. Köhler and Schreiber, of Halle, point out that large doses of oil of rosemary (administered to animals) antagonise the pathological irritability induced by strychnia. Its powers of reducing temperature are also remarkable: given by the stomach, it produces a temporary reduction of about 2°, but administered by inhalation, it will effect a reduction of as much as 8°. Sidney Ringer records the beneficial employment of physostigma (one-tenth grain at frequent intervals) in three cases of paraplegia, two of ataxy, and one of writer's cramp. Gubler testifies to the immediate diuretic effect of the citrate and bromhydrate of cafeine administered hypoder-

mically in $7\frac{1}{2}$ grain doses. Grützner has been investigating the action of diuretics, and finds that the renal secretion may be increased in two ways, medicinally:—1st, by raising the pressure in the arterial system generally, as by strychnia or digitalis, and secondly, by directly influencing the secreting tissues of the organ, as by urea or the nitrate of soda. The diuretic effects of the resin of copaiba in cases of ascites, &c., has called for remarks by several writers during the year. Jagielski, Lowther, and many others testify to the efficacy of koumiss in the treatment of obstinate sickness and irritability of the stomach; and its great utility as a combined stimulant and food in cases of phthisis and other forms of inanition attended with gastric hypersensibility, has been on all sides attested. The various forms of soured milk, either in the solid or fluid form, promise to prove a valuable addition to our armamentarium in the conflict with disease. Milk itself still holds its place as one of the most, if not the most, valuable of diuretics, and the restriction to a milk diet has time and again throughout the year been found most efficacious in removing serous effusions after other means had failed. The great utility of the wholly milk diet in diabetes and in the various chronic disorders of the bowels is now a matter of everyday experience. Milk has been found to be an excellent solvent, and one of the most agreeable vehicles, for quinine. The researches of Auerbach, of Berlin, demonstrate that the reputed hypnotic properties of lactic acid are absolutely *nil*. Mr. Annandale, of Edinburgh, records a case of writer's palsy cured by hypodermic injection of strychnia on Bianci's plan. Semmola has found electricity the most effective remedy in nervous vomiting, though strychnia has been highly spoken of by a French writer during the year. Huchard highly extols opium as a remedy in cerebral anæmia and diseases of the heart. Mr. Wm. Stewart regards chloral as the remedy *par excellence* in laryngismus stridulus; and Surgeon-major Hall and others bear testimony to its value hypodermically in malignant cholera. Cases of tetanus, too, are this year again recorded in which its use seems to have been of benefit. Atropia has now fully established its power of controlling morbid diaphoresis, and Mr. J. Stuart Nairne, of Glasgow, points out that the external use of tincture of belladonna is equally effective. He employs ʒij of the tincture with an equal quantity of whiskey, and this suffices for the whole body. Dr. Vinkhuysen, after ample experience, reports quinetum to be superior to quinine for the majority of purposes. Guyot records the successful employment of the sulphate of quinine in chronic diarrhœa. Several writers during the year have recommended hyoscyamine in hydrophobia, and many appear to regard it as the most potent and beneficial remedy we possess in mania. Gelsemium maintains its reputation as an antineuralgic for the trigeminal nerve, and Prof. Massini, of Basle, reports favourably upon it. Its ophthalmic effects are well established, but as to its reputed power of promoting dilatation of the cervix uteri, we have this year seen no testimony. Apart from its ecbolic and hæmostatic properties, ergot has lately proved of service in cerebral, spinal, and many other affections. Schumacher lauds it in the treatment of angioparalytic megrim, Siredey in typhoid fever, Molfese in diseases of the bladder, Atlee and Satterthwaite in enlargement of the prostate, and Rendu, of Paris, and DaCosta in polyuria. Digitalis maintains its reputation as a diuretic and as a tonic to the heart, and, at a late meeting of one of the Paris societies, the opinion was expressed, and pretty generally entertained, that cases of cardiac affection in which it would not prove of service are few and far between. It appears to act, as occasion may require, either as a tonic or a sedative to the heart. Desnos advocates its use in congestive dysmenorrhœa when ergot has failed to afford relief. Dr. Martelli reports the favourable treatment of asthma by subcutaneous injections of arsenic (Fowler's solution, 1 part to 2 of water) Whittaker, of Cincinnati, has found 5 drops of Fowler's solution three times a day efficacious in four cases of obesity. Jacquier has found the oxide of zinc of service in diarrhœa. Radcliffe Crocker recommends the oleate of zinc in eczema, especially in the discharging stage. Duhring and Van Harlingen have found Balmanno Squires glycerole of the subacetate of lead beneficial in eczema rubrum of the legs, but it

possesses no antipruritic properties. Féréol and Bourdon have found the ammoniacal sulphate of copper of striking benefit in facial neuralgia; and Levi and Barduzzi have insisted upon the tonic properties of the sulphate of copper given in pill form in the dose of half a grain to one grain per diem. Dr. Howard Cane highly extols the use of sulphide of calcium in acne as suggested by Ringer. Dr. John Brunton records two cases of nævus successfully removed by the application of sodium ethylate as suggested by B. W. Richardson. Testimony on all sides has not been wanting as to the beneficial effects of the application of soda to burns. Chrysophanic acid has been generally pretty favourably reported on by dermatologists as a remedy in psoriasis and the tineæ. Its irritant properties, and the almost indelible stain it produces, are objections to its use. Mr. Squire has found, however, that ordinary bleaching powder, properly used, will remove the stain, and a Scotch observer has found benzole on blotting paper useful in this respect. Most English and American dermatologists have found it useful, and Besnier, of the St. Louis Skin Hospital in Paris, reports favourably upon it. Neumann, Hebra, and Zamisch also regard it favourably; and Hebra points out that its proper name is Bioxymethylanthracinon. It is identical with the colouring matter of the madder root, alizarin, and this latter has already been used successfully, in psoriasis, by Dr. James Adams, of Glasgow. Radcliffe Crocker, of the skin department of University College, speaks highly of the use of thymol and thymic acid in the form of ointment in cases of chronic eczema and psoriasis, and especially as a parasiticide. The value of glycerine in internal hæmorrhoids has been repeatedly alluded to throughout the year, and its use as a succedaneum for cod-liver oil, where the latter can not be tolerated, is becoming pretty generally recognised. Dr. B. W. Richardson, in his lectures this year before the Faculty of Glasgow, showed that the therapeutic application of oxygen must be as an eliminant and relaxant: these properties it possesses in an eminent degree, but the difficulties of its proper administration are insuperable in private practice. Planat of Nice, testifies that the local application of arnica rapidly arrests furuncular inflammations. Stern reports favourably of carbolic acid in intermittent fever. Mr. Henry Kennedy reports in the *Practitioner* five cases of diabetes insipidus cured by dilute nitric acid, and Dr. Balfour, of Edinburgh, records a case of saccharine diabetes astonishingly controlled by its administration. Dr. Long, of the U. S. marine, employs the mistletoe (viscum album) as an oxytocic, and to arrest uterine hæmorrhage. The vibunum prunifolium, as a uterine tonic and antiabortive, appears likely to verify the expectations formed of it. Sherwell, of New York, recommends linseed and linseed oil as a substitute for cod-liver oil in marasmus, &c., and as a local application of great utility in pemphigus foliaceus, eczema, &c. Louvet Lamare and Constantin Paul report favourably of drosera rotundifolia in whooping-cough, as does also Camperdon of tincture of myrrh. Dr. Goldsmith, of Atlanta, recommends the dried pith of the corn stalk for uterine tents. Dr. Ralfe has undertaken a series of observations showing that, as pointed out long ago by Bence Jones, the alkaline bicarbonates administered on an empty stomach increase the acidity of the urine, but that when given on a full stomach they diminish it. The literature of this department is not neglected. We note the appearance of the following works:—Ott on the Action of Medicines, 4th edition Parrish's Pharmacy, 4th edition Stille's Therapeutics and Materia Medica, the National Dispensatory, by Stille and Maisch, 3rd edition Griffith's Formulary, 11th edition Squire's Companion to the B.P., Kidd's Laws of Therapeutics, 6th edition Ringer's Therapeutics, American edition Farquharson's Therapeutics, and a Syllabus of Materia Medica, by Harvey and Davidson.

MEDICINE AND PATHOLOGY.

In the field of medicine the husbandmen have not been idle, nor has their labour been in vain. The harvest of the year is a rich reward, and the heritage transmitted to its successors is one to be cherished as of much value. Cohnheim's views on the pathology of inflammation have been fully corroborated by Senftleben's recent experiments with the cornea of the rabbit. Peter's researches upon the

subject of morbid local temperatures are fraught with most vital consequences, both diagnostic and therapeutic. An increment of from two to three degrees in the local temperature of the affected part has been observed and pointed out by him in pleurisy and in certain malignant affections of the stomach and bowels. Auguste Voisin has also observed and turned to account, in diagnosis of certain mental affections, the local temperature of the head at various points. The subject of metalloscopy and metallotherapy has continued to attract a large share of attention throughout the year. Charcot, Vigouroux, Burq, and many others have further confirmed and extended the observations previously made; and the cases of A. Hughes-Bennett and Horatio Donkin, although good examples of what mental influence can effect, in no wise invalidate the carefully observed and recorded cases of others, especially those of hemiplegia of organic origin, nor do they touch upon the subject of the value of metalloscopy in indicating an internal remedy which will prove of service.

Dr. Brookhouse, of the Nottingham General Hospital, contributes two cases to show the beneficial effect of absolute rest, low diet, and iodide of potassium in aortic aneurism. At the Pathological Society, Drs. Ralfe and Douglas Powell showed specimens of spontaneous cure of aortic aneurisms, and Dr. Lediard exhibited a specimen from a case which had followed the unusual course of bursting externally. Dr. Braidwood reported at the Pathological Society an unprecedented case of unilateral cancer occurring primarily in bone. Prof. Prunniche has directed attention to the great value of the inverse type of temperature as a sign of miliary tuberculosis. Dr. F. Marchand has met with (Virchow's Archiv) one of those rare cases in which tubercular deposits are found in voluntary muscles. The experiments of Tappeiner, of Meran are very conclusive in demonstrating that a small quantity of fine particles of phthisical sputum suspended in the atmosphere gave rise to miliary tuberculosis in the lungs of dogs, although at time of killing—twenty to twenty-five days—no external evidences of ill-health were observed. Feeding the sputum to them was not so successful. Dogs were selected as not being prone to the development of tubercle. Max Schottelius found that the sputum of bronchitis had an equal effect, and that particles of cheese, of brain and of cinnabar suspended in the air had a similar, but much slighter, effect. Dr. Webb, of Philadelphia, adduces in the April number of the *Amer. Jour. of Med. Science*, irrefragable evidence as to the contagiousness of pulmonary phthisis. Dr. C. T. Williams records a case of pulmonary phthisis with large vomica in which the cavity was tapped with good results. Further testimony in favour of F. T. Roberts's method of strapping the chest in phthisis is adduced by J. K. Spender, of Bath. Mr. Jonathan Hutchinson has suggested as the best means of preventing hydrophobia the systematic extraction of the canine teeth of all dogs. Dr. Nicholls, of the Chelmsford Infirmary, records a case of rabies ending in recovery. The medical treatment consisted in the almost continuous administration of chloroform and the hypodermic injection of morphia and calabar bean. Drs. Schmidt and Lebeden record a case of cure of hydrophobia in a child by oxygen gas. Two cases of hydrophobia in the Manchester Royal Infirmary have enabled Dr. Ross to make important discoveries (not yet made known) in connection with this disease, and to trace the changes which are rather molar than molecular, right up the lateral columns of the cord to the brain. Dionis de Carrieres records a case of tetanus cured by warm baths prolonged for from two to six hours. Blachez reports two similar cases. The researches of Aufrecht, of Magdeburg, published this year, go to support the view that the lesion in tetanus consists in an acute, diffuse, central myelitis. J. Christian's observations go to confirm the view held by Bouillaud, Marcé, and Jaccoud that general paresis of the insane is an ataxia and not a paralysis. Terrillon records two cases of sudden death from embolism of the right side of the heart. Cases of arrest of embola in the heart have not hitherto been recorded as they usually pass on into the pulmonary arteries, but in each of these cases the embolon was found rolled up in the right heart. Dr. Tibbits records a case of embolism of the right middle cerebral artery attended with loquacity.

Grœdel reports favourably of warm saline baths in cerebral embolism ; but they prove injurious in sanguineous apoplexy. Westphal, Erb, Berger, Buzzard, Althaus, and Grainger Stewart have each again called attention to, and recorded cases of, the phenomenon of tendon reflex as an early sign of tabes dorsalis. Buchwald, of Berlin, records three cases of spiegelschrift (mirror-writing) with the left hand in right hemiplegia. M. Dejerine has called attention to the existence of reflex trembling of the sound side on sharp flexion of the limb in hemiplegia ; this has been very commonly observed on the affected, side but has not hitherto been noted on the sound. Mr. J. Stuart Nairn, of Glasgow, records a unique case of left facial paralysis following extraction of a lower molar on the right side. In the *American Journal of Medical Science* for July, Dr. Weir Mitchell describes a new affection of the nervous system somewhat similar to what Gross describes as podynia. He has denominated it erythromelalgia. Vallin records a case of arthritis secondary to acute myelitis. This is, so far as it goes, a confirmation of the old theory promulgated by John K. Mitchell, that acute rheumatism is an affection of the spinal cord. M. Debove points out a new symptom of paralysis agitans which he designates lateropulsion. It consists in an inability to read, owing to the fact that one line being read and another commenced the patient suddenly and unconsciously reverts to the previous line. In the treatment of bedsores in these affections, Dr. Mills adds his testimony to the value of the negative pole of the galvanic battery. Prof. Rose has published a monograph on death from goitre, in which he shows that the pressure of the tumour produces fatty degeneration of the cartilaginous rings of the trachea, thus transforming the usually rigid tube into a membranous and flaccid canal, the lumen of which a sudden twist or slight pressure will suffice to obliterate. Prof. Bitot reports eight successful transfusions of blood in four cases of chronic anæmia by means of a new apparatus. He attaches great importance to the prevention of the usual subsequent chill by the administration of quinine. He regards transfusion as mischievous, rather than otherwise, in cancerous affections. Mr. Patrick Letters, of Dundee, also records the successful treatment of chronic anæmia from gastric ulcer by transfusion of blood. Poniklo, of Cracow, in the autopsies of five diabetic patients, has found an increased amount of connective tissue in the ganglia of the sympathetic—especially the upper and lower cervical—and a shrunken and granular condition of the nerve elements. Dr. Wiltshire again directs the attention of the profession to pruritus vulvæ as being sometimes the sole outward symptom of saccharine diabetes. In addition to the deceptive substances pointed out by Hay, of Philadelphia, last year, Dr. Pye. Smith, of Guy's, has found that the urine of patients taking alicylic acid or its salts will throw down the suboxide of copper with Trommer's test. Dr. Balfour, of Edinburgh, places on record the case of a young man suffering from diabetes mellitus, greatly benefited by 20 minims of dilute nitric acid four times a day after all other remedies had failed. The daily excretion of urine fell from 400 oz. to 50 oz., and that of sugar from 16 oz. to 10 oz. The body weight increased two stones. Judging from the discussions on this subject at the Paris societies this year, French authorities would regard such cases as glycosuria, but not diabetes. Dr. Lewis (*Virginia Medical Monthly*) records a case of unilateral manifestation of the malarial paroxysm. An epidemic of cerebrospinal meningitis occurred this year in Dundee, and the disease was pronounced by Dr. J. T. Maclagan, of the Royal Infirmary, to be contagious. Dr. Goodhart, of Guy's, speaks highly, and records four cases of paracentesis thoracis and abdominis by means of Southey's capillary cannulæ and drainage tubes. Other observers also speak equally favourably of this method in these cases and also in anasarca. Dr. Stephen Mackenzie, of the London Hospital, advocates, and records successful cases of the treatment of ascites by abdominal compression. M. Lepine, in his researches upon the alkalinity of the blood, has found that in chronic articular rheumatism the blood is always less alkaline than in the normal condition. Auguste Ollivier records a case of true spinal gout, in which infiltration of urate of soda was found on the external surface of the spinal dura mater. M. Feltz affirmed at the Académie des Sciences the presence of crypto-

gamic germs in the blood of typhoid patients: they are capable of vegetating in flasks containing pure air alone (ærobic). At the Clinical Society of London, Mr. Legatt read notes of a case of yellow fever in England. It was also seen by Dr. Murchison, and had been contracted in South America. The period of incubation must have been at least twenty-seven days. Dr. Braidwood has this year described some bacterial forms met with in the expired air and in the blood of a couple of cases of measles. Mr. Iliffe, of Kendal, records a case of measles in a young woman in which for a period of ten days remarkable fluctuations of temperature, from 101° to 107°, occurred without apparent or discernible cause. Some remarkable cases of high temperature have this year been placed on record. Dr. Ormerod, of the Metropolitan Free Hospital, reports a case in which the thermometer registered as high as 115°·8. The woman had a short time previously had an attack of acute rheumatism, but the pathological condition at the time of this registration was not made out. (Pulse 120.) Dr. C. S. Mercier records a case of yellow fever with an axillary temperature of 111°; five hours after death 105°·5, and in the hypogastric region after incision 109°. Dr. Donkin, of the Westminster Hospital, records a case of remarkably high temperature during and after convalescence from typhoid fever: all sources of error and deception were carefully eliminated. The highest point reached was 111·°6; and fluctuations between 98°·6 and 110 were time after time observed. Sellerbeck records an instructive case of simulation of fever, in which the thermometer was made to register high by almost imperceptible friction between the arm and the night dress in the axilla. A great deal of discussion has taken place during the year in the English and French journals upon the question of the pathognomonic value of ulcer of the frænum linguæ in pertussis. It appears that this ulceration is very commonly present and results from the propulsion of the tongue over and against the incisor teeth in the act of coughing. It would appear that the committee appointed by the Royal Medical and Chirurgical Society to inquire into the question of the identity of croup and diphtheria, have reached the conclusion that they are one and the same disease; but the report has not yet been published *in extenso*. A. B. Isham, of Cincinnati, in an excellent paper published in the October number of *American Journal of Medical Science*, suggests a new theory of the etiology of paro titis. He regards it as being due to a plugging and obstruction of the excretory duct of the gland, and he succeeds in making out a good case. Heinlein, of Erlangen, reports urticaria as resulting from the use of salicylate of soda. Dr. Stephen Mackenzie records a fatal case of purpura following the administration of a single dose of iodide of potash in an infant, the subject of congenital syphilis. Dr. Thin has this year shown that the proportion of red blood corpuscles is above the average in psoriasis and about normal in eczema. Dr. Ord exhibited two cases of myxœdema (adult cretinism) at the meeting of the Royal Medical and Chirurgical Society on the 9th of April. Dr. C. H. Bennett, of Dublin, reports a hitherto unobserved case of calcification of the adipose tissue. At the Clinical Society, London, Dr. Felix Semon showed a rare and interesting case of paralysis of the posterior crico-arytenoid muscles. Dr. Sommerbrodt records a case of submucous laryngeal hæmorrhage simulating a foreign body; on incision of the tumour, the blood escaped and the symptoms were relieved. An unique case of herpes of the larynx is reported by Dr. Charles Fernet, of St. Antoine Hospital, Paris. Peter, in his article on the larynx (*Nouveau Dictionnaire*), admits the possibility of its occurrence, but this is the first time the herpetic vesicle has actually been seen in this situation. Dr. Broadbent records a case of hydatids of the lungs so closely simulating pneumothorax that the diagnosis was only made *post mortem*. Dr. Welch, of New York, under the direction of Cohnheim, has been making a series of experiments to determine the cause of œdema of the lungs. He reaches the conclusion that the immediate cause is predominant weakness of the left ventricle of the heart. Fernet this year announces that he regards pneumonia as a herpes of the lung due to pneumogastric neuritis. This view is also supported by Parrot and Lagout. A case of pneumonia from railway shock is recorded by Mr. Bennett

and Dr. Clifford Allbutt. No abrasion or contusion was anywhere found, and no other lesion than the lung trouble existed. The mandied and the railway company was mulcted in damages. Dr. Ralfe reports the occurrence of gangrene of the lung in a case of lead-poisoning, apparently due to embolism. Dr. Bœgehold, of Berlin, reports a case of fatty effusion into the pleura. Mr. Adams (Pathological Society) showed a case of spontaneous rupture of the œsophagus in a man aged 53, who had suffered from dyspepsia. The lower end of the œsophagus was thinned, and so was the cardiac end of the stomach, but no other change was found. Dr. Brabazon, of Bath, records a general atrophy of the stomach with absence of organic disease. Dujardin Beaumetz records a case of sphacelation of the entire mucous membrane of the stomach from the effects of a corrosive. All the appearances of health and active digestion were maintained for a fortnight, and death appeared to be due to separation of the slough. Dr. Macnab, of Bury St. Edmunds, records a case of diaphramatic hernia of the entire stomach through a hole in the tendinous portion of the diaphragm, the result of an old empyema. Malbranc, of Naples, adds his testimony to the successful treatment of gastralgia by the internal stomach douche, when other means had failed. In stomach affections giving rise to inanition, rectal alimentation by defibrinated blood has been favourably reported on to the N. Y. Therapeutical Society. Brown-Séquard adds his testimony to the utility of Leube's meat and pancreas (freshly removed) clysters in such cases. Dr. Stephen Mackenzie records a rare case of traumatic abscess of the liver treated by puncture and irrigation of the cavity, followed by recovery, in spite of a diaphragmatic pleurisy and slight septicæmia. Dr. Shingleton Smith records a case of acute atrophy of the liver, in which an atrophic condition of the nerve cells of the sympathetic ganglia was found. The occurrence of blue bile in the vomit of a woman is recorded by Prof. Andouard. Dr. McConnell, of Calcutta, has again met with the distoma sinense in the human liver—the second case on record. Mr. Bryant records a case of sudden death after tapping a hydatid cyst of the liver. The trocar and cannula were not larger than a silver probe, and nine ounces of clear fluid were withdrawn. Death in five minutes; cause not discovered. Dr. Katz, of Berlin, records a case of hydatids of liver bursting into the air passages, followed by recovery. Mr. W. E. Green records a rare case of hepatico-bronchial fistula. Dr. Krull advocates large enemata (three to four pints) of cold water (about 60°) in jaundice. Bucquoy, of the Hôpital Cochin, records a case of hydatids of the spleen cured by two aspirations. Dr. Markham Skerritt reports a case of spontaneous rupture of the spleen. Lorentzer records a case of abdominal abscess discharging worms. Bucquoy records three cases of cure of intestinal invagination by electricity. Dr. Powers, of Michigan, records a case of invagination in a child, with discharge of thirteen inches of small intestine *per anum*, followed by recovery. Debrou (d'Orleans) records a case in a child eight years old, with discharge of a metre (39·37 inches) of small intestine, with recovery. Dr. Tuckwell, of Oxford, reports a case of intestinal obstruction, with fæcal vomiting, treated successfully by belladonna. Dr. Exchaquet (de Rolle) records a case of complete intestinal occlusion, lasting twenty-nine days, attended with fæcaloid vomiting, ending in recovery. Dysuria (and, indeed, almost complete anuria) was a prominent symptom. The duration of this case is probably the longest on record. Messemer, of New York, warmly advocates cold water enemata in chronic diarrhœa. Robin points out two unknown characters of the urine in interstitial nephritis—the presence of a notable quantity of urohæmatine, and the existence under the microscope of amorphous pigmentary garnet masses. Dr. Dickinson met with ulceration of the bowel associated with granular kidney. In the April number of Virchow's *Archiv*, Beumer records forty-eight cases of congenital absence of one kidney, collected from various sources. At the last meeting of the British Medical Association, Grainger Stewart gave in his adhesion to the view that cirrhosis of the kidney is an inflammatory process. Byrom Bramwell records a case of large cystic tumour of left kidney in a

patient ten years of age; aspiration was performed, and recovery ensued. Also, a large solid tumour of left kidney, over which a murmur was heard, in a miner. Dr. Ord exhibited to the London Pathological Society a renal calculus containing indigo. Dr. Irvine showed to the London Pathological Society a dermoid cyst of the cerebellum, containing a sebaceous material and hair, from a child aged seven years. Mr. Fred. Treves, of Wirksworth, publishes a case of injury, further establishing the fact that bilateral destruction of the antero-frontal region causes neither motor nor sensory paralysis. Laveran reports a case of infarctus of the heart following thrombosis of a coronary artery. Hammer, of St. Louis, U.S, records a similar case, in which he recognised the lesion during life. Potain and Gubler have reached the conclusion that certain dilatations of the right heart are due to gastric and hepatic affections. Sourdes, of Nancy, met with a heart weighing 3lbs. 4oz. avoirdupois. Dr. Bell exhibited at Bradford a specimen of aneurism of the left ventricle of the heart. At the Bristol Society, Dr. Shingleton Smith exhibited an almost unique specimen of syphiloma of the heart. Dr. Peacock exhibited at the Pathological Society a specimen from a little girl ten years of age. An opening the size of a florin was found in the septum ventriculorum, the foramen ovale and ductus arteriosus being closed. A similar case is recorded by Rokitansky in his recent work. At the same meeting, Dr. Wickham Legg showed an aneurism of the right ventricle. Zahn, this year, directs attention to diseases of the diaphragm. He regards its degeneration as frequent, and describes brown atrophy, granular and fatty degeneration, and the waxy, or vitreous. Gowers, of University College, records a case in which a peculiar form of albumen occured in the urine; heat rendered it opaque, but boiling cleared it up again. Stokvis has recorded something similar. The temporary existence of albuminuria is not incompatible with health, as the recent researches of Prof. Leube, of Erlangen, have shown. Truly, "of the making of many books there is no end," as the following list will show:—Additional volumes up to XXV. of Jaccoud's *Nouveau Dictionnaire*, fifth and last volume of Reynold's System, concluding volumes (all but one) of Ziemssen's Cyclopædia, third edition of Roberts's Theory and Practice, fourth edition of Flint, second edition of N. S. Davis's Clinical Lectures, second edition of Bristowe's Principles and Practice, fourth edition of Green's Pathology, an Atlas of Illustrations of Pathology, Fasc. I. Dis. of Kidney (New Syd. Soc.), Shettuck and Sabine's Trans. of Orth's Compend. of Diagnosis in Patho. Anatomy, Shakespeare's Trans. of Cornil and Ranvier's Pathol. Histology, *Nouveaux Elements d'Anatomie Path., Descript., et Histol, par Laboulbène*, Delafield's Manual of Physl. Diagnosis (interleaved for notes), third edition of Bennett on Treatment of Pulmonary Consumption, Synopsis of Dis. of Larynx, Lungs, and Heart, by F. de Havilland Hall, Shepherd's Gulstonian Lectures on Pulmonary Consumption, *Du Diagnostic et du Traitement des Maladies du Cœur par Germain Sée*, second edition of The Heart and its Diseases, by Milner Fothergill, Berkhart on Asthma, McLane Hamilton on Nervous Diseases, The Localization of Cerebral Disease by Ferrier, Magnan on Alcoholism, Pavy's Croonian Lectures on Diabetes, Fothergill's Antagonism of Therapeutic Agents, and Finlayson's Clinical Manual for Study of Medical Cases.

SURGERY.

The surgery of the year presents a record of much interest and value. Mr. Messenger Bradley this year caps the climax of surgical triumphs by succeeding in securing the so-called "crowning glory of the antiseptic system—the organization of blood-clot in a wound—by a simple anhydrous dressing. Mr. Henry Smith reports a case of ununited fracture of the patella, in which he followed Lister's example of cutting down antiseptically, drilling the fragments, and uniting them with silver wire, with perfect success. Mr. Geo. Lawson records a case of fracture of the pelvis, in which the head of the femur was driven through the acetabulum, but no fracture of the femur was found. Mr. Berkeley Hill reports a compound fracture of the ilium, followed by parenchymatous inflammation of both parotids and death. Mr. Bellamy records a fracture of the

humerus at the deltoid curve, resulting from direct muscular action—throwing a cricket ball. At the West London Hospital, three cases of fracture of the pelvis are this year recorded, death in all being due to internal hæmorrhage from rupture of a large vessel. Terrier, of the Bicêtre, records a case of fracture of the sternum (fatal). Dr. Machell, of this city, records another, followed by recovery. Muhlenberg, of Reading, Pa., has invented a very simple and useful splint for compound comminuted fractures of the jaw. Collins, of the Jervis Street Hospital, Dublin, records a case of extensive compound comminuted fracture of the sphenoid, with rupture of the internal maxillary artery and subsequent necrosis, followed by recovery, in a boy aged fourteen. Dr. Senkler, of this city, reports a case of separation of the epiphysis of caput femoris. *Apropos* of fractures, it may be mentioned that Dr. Jarvis S. Wight reiterates his statement of the inequality in length of the majority of normal limbs. J. B. Roberts, of Philadelphia, confirms the assertion by the actual measurement of a number of skeletons; and Hamilton, who at first denied it, admits his error, and makes the *amende honorable* to Dr. Wight. Several examples of rare forms of dislocation are this year recorded. Hird, of Charing Cross, reports a dislocation of the astragalus, with fracture of the neck of the bone, from falling downstairs. Mayo Robson, of Leeds, records a luxation of the jaw during a paroxysm of hysteria, and also a luxation of the sternal end of the clavicle upwards. Mr. Goodall, of the Birmingham Hospital, records a genuine case of pure dislocation of the wrist—one of the rarest of accidents in surgery. It was verified by *post mortem* dissection. Dr. P. S. Conner reports a case of backward (subacromial) dislocation of the head of the humerus, with reduction on twenty-ninth day. Thos. Smith reports a reduction of luxation of shoulder with the heel in the axilla, in which, although no immoderate force was used, the pectoral muscles were torn through like parchment, but the vessels and nerves escaped. Death followed in nine days—a strong argument in favour of reduction by manipulation and a sad commentary on the old method. Uhde, Hagemann, and Boettger record a case of dislocation of the atlas, the right surface forward, the left backward. The luxation could not be reduced, but the patient gradually gained some power of moving the head, and there was also some improvement in the functions of the partially paralysed tongue and palate. Little, of Dublin, reports a case which may be regarded almost as a surgical anomaly—a genuine and uncomplicated dislocation of the spine. The fifth vertebra was symmetrically luxated forwards on the sixth, the displacement of the articular processes being complete. During life, no displacement could be detected on examination, even through the pharynx. There was loss of power over the upper limbs, but the boy walked into the hospital. Death occurred on the eighty-sixth day from gradually increasing dyspnœa. Voelker reports a unilateral luxation of the fifth cervical vertebra from muscular action. Reduction being effected, recovery ensued. Thoresby Jones records a dislocation of the sacrum forwards without fracture of any of the pelvic bones; confirmed by *post mortem* examination. Lücke, of Strasburg, records a case of necrosis of tibialis anticus, the extensor muscle of the great toe and the common extensor of the toes. The man fell upon the ice without observing much injury at the time. These muscles subsequently sloughed, in consequence, it is supposed, of embolism of the artery supplying them. McDonnell, of Stevens' Hospital, Dublin, reports a case of rupture of the tendon of the gluteus maximus. Mr. Robt. Roxbrugh records a case of rupture of the quadriceps extensor cruris in both limbs, in which Mr. Lister cut down antiseptically and tied the ends together with carbolized catgut, with good results. Güterbock reports a case of subcutaneous rupture of the tendon of the triceps brachii. The testimony of the year as to the great utility, success, and convenience of Sayre's method of treating Pott's disease of the spine by the plaster of paris jacket is almost universal. The use of his self-suspending swing in lateral curvature is also highly approved. Messrs. Samson Gamgee, Heather Bigg, and Golding Bird have devised various minor, but still important, improvements in his suspending apparatus. Mr. Maunder's horseshoe

wire addition to the collar is a considerable advantage, as is also Mr. Thos. Cook's water padded collar. Mr. Adams has had good results from the use of poroplastic felt, instead of plaster of paris, applied during suspension. At the Bath meeting of the British Medical Association, Dr. Walker, of Peterborough, demonstrated his method of applying Sayre's jacket in the recumbent position. Mr. Pearce Gould and Mr. Jno. Ewens (of Bristol) report favourably of the treatment of spina bifida by Morton's iodo-glycerine solution. Although of late years the great progress of surgery has been in the direction of the conservation of parts, yet the science of their removal has not been at a standstill, as the following cases serve to show. Geo. F. Schrady and J. W. Howe have practised the bloodless removal of the tongue for cancerous disease by the preliminary ligation of the lingual arteries near their source. It is believed, moreover, that this practice tends to prevent recurrence. Mr. Lund, of Manchester, has repeated Whitehead's operation of excising the tongue with a pair of scissors only. Mr. Wood, of King's College, successfully removed a tongue for epithelioma by passing the chain of the ecraseur through an opening made in the neck above the hyoid bone after division of the parts in the floor of the mouth with scissors. The stump was touched with chloride of zinc. The only objection to this procedure is the long time the wound in the neck usually takes to heal. Mr. Coppinger, of the Mater Misericordiæ Hospital, Dublin, records two cases of removal of tongue by ecraseur by a new method. A curved needle, threaded with a cord attached to the chain of the ecraseur, was passed from side to side through the root of the tongue, and the tongue then separated from the floor of the mouth by the ecraseur cutting from behind forwards. A button hole was then made in the cheek corresponding to the front edge of the masseter, through which the loop of the ecraseur was passed from side to side, and the tongue drawn forward through the loop and slowly divided. There was no bleeding, and the wound in the cheek was healed in two days. Dr. Lyster reports the bloodless removal of the tongue with the thermo-cautery. Dr. Murphy, of Wilkesbarre, Pa., reports a successful amputation at hip joint for an osteocephaloma of femur. Verneuil obviates hæmorrhage by ligating the vessels before amputating. Mr. Davy records two cases in which he controlled hæmorrhage by means of a stick passed into the rectum and compressing the iliac artery against the pelvis—a method which he suggested four years ago. Tillaux disarticulated at the hip with the galvano-cautery. There was no bleeding, but the woman subsequently died of purulent infection. Langenbeck, at the late Congress of German surgeons, showed a case in which he performed disarticulation at the elbow, an operation which has fallen into disgrace. Dr. Knauth records a case of traumatic resection of the scapula followed by recovery. Brigham, of San Francisco, reports the subperiosteal excision of entire scapula (for necrosis) and the head of the right humerus with recovery and full use of hand and forearm and partial use of arm. Gundrum, of Ionia, Mich., reports the successful extirpation of the scapula with a portion of the clavicle and entire arm. The cotton wool dressing was employed. Peters, of New York, records the successful removal antiseptically of the entire scapula for cancerous disease. Recovery with useful arm. Mr. Morrant Baker records the successful excision of ankle in a child aged seven years and a-half. Mr. Bradley exhibited at the Manchester Society a little girl half of whose lower jaw he had excised subperiosteally, and in whom almost complete bony restoration of the jaw had occurred. Schede reports the successful resection within four months, in the same patient of both wrists and elbows, as well as both ankles, for rheumatic arthritis, with bony anylosis. Mr. West, of Birmingham, successfully removed the astragalus, scaphoid and cuboid bones for the cure of a talipes equino-varus in the adult. Mr. Lund successfully removed the astragalus in a case of extreme varus. Mr. Adams has introduced a useful modification of Scarpa's shoe. Mr. West records the successful removal of an exostosis antiseptically. He applied Esmarch's bandage, cut down upon the tumour, and removed it with chisel and mallet. Mr. Field, of St. Mary's Hospital,

successfully treated an ivory exostosis of both ears, and Solis Cohen, of New York, one of one ear by drilling it with the burr of the dental engine. The correction of deformities by bone section is making rapid strides. MacEwen, of Glasgow, records an antiseptic osteotomy of internal condyle of femur with the chisel—good result. Ogston's operation has been several times successfully performed by Mr. Jones, of Manchester. Mr. Reeves successfully performed on two occasions during the year, extra-articular osteotomy for genu valgum by a new method. It differs from Delore's, Ogston's, Max Schede's, Annandale's, and MacEwen's, in the use of the chisel and in cutting only to the cartilage, the chisel being then used as a lever to prize the condyle inwards, the leg being then forcibly straightened. As indicating a possible and very unfortunate mishap, Mr. Barker reported to the Clinical Society of London, a fatal case of Ogston's operation in a patient aged six years. All went well; the operation was done antiseptically, and the limb put up in plaster. Next morning the temperature was 99°.8; a few hours later it rose to 105°.4. Next day consolidation of base of right lung was found. No inflammation about the joint. Death took place forty-eight hours after the operation, and the autopsy revealed septic pneumonia with hæmorrhagic infarcts of inferior lobe of right lung. Petersen, of Kiel, recommends carbolic acid injections in chronic inflammatory affections of the joints. Martin's India rubber bandage has proved very effective in various diseases and injuries of the joints; the equable pressure, heat, and moisture, together with immobility, which it secures fulfilling nearly all indications. We are pleased to observe the extension in the old world of the American system of treating chronic joint affections by constant extension, permitting of mobility. Mr. Maunder records the successful removal of a cystic tumour of lower jaw without external incision. The use of the antiseptic system in surgery is becoming quite generalized in hospital practice, but the difficulties and expense of its application must prove an insuperable bar to its general adoption until these objections can be removed. Doubtless the results of the excessive care and attention to minutiæ which the system inculcates will always be attended with the most gratifying results. Mr. Chiene's and Mr. Messenger Bradley's endeavours to cheapen its application are worthy of all imitation. Ranke, of Halle, highly extols the use of thymol in antiseptic surgery. Mr. Howard Marsh records a case of hæmorrhage following operation for cleft palate which was arrested by plugging the posterior palatine canal. Foulis, of Glasgow, records removal of a tumour of soft palate extending down into the tonsil by, having first performed laryngotomy and plugged the larynx with sponge, slitting the cheek from the angle of the mouth to the angle of the jaw, and then sawing through the ramus at the angle—thus getting plenty of room and free access. After removal of the tumour, the rami were sutured with silver wire and the incision in the cheek sewn up. First-rate recovery followed. Mr. Henry Smith this year records a fourth series of cases of hæmorrhoids which he has operated upon with the clamp and cautery. This brings his total up to 530. On the last two hundred and fifteen occasions, there has been no death or other serious mischief to record. Dr. W. Wannebroucq regards the treatment of internal hæmorrhoids by forcible dilatation as more convenient and successful than any other. "The battle of the ligatures" has not yet been decided. The advocates of catgut report their successes, the opponents their failures: the old silk and metallic ligatures command the respect of all, but a material which will not interfere with primary union, nor require removal, is undoubtedly a great desideratum. The liability of the knot of the animal ligature to yield or come undone, and the possibility of its too rapid absorption, frets the surgeon's mind with a feeling of insecurity. Tendon ligatures from the tail of the kangaroo have been used in Australia, and are said to be superior to catgut, being more angular, and slipping less readily, and not so speedily dissolved. Mr. Callender exhibited some at the Clinical Society, and proposed to have some made from the tail of the horse. The great record of the year in the surgery of the vessels is instructive, as the following cases make apparent:—Dr. Porcher,

of Charleston, records an unsuccessful ligation of the common carotid at its lower third as a warning against the use of animal ligatures. Mr. Barwell records two cases of successful treatment of innominate aneurism by ligation antiseptically of the subclavian and carotid. Dr. Byrom Bramwell contributes to the *Edinburgh Medical Journal* notes of seven cases of aneurism (six aortic) greatly benefitted by rest and iodide of potassium. M. Broca reports a case of aneurism of the arch of the aorta successfully treated by the application of collodion. Drs. Selion and G. Polli also record (each a case) successful treatment by the application of ricinated collodion. Mr. H. L. Browne (West Bromwich Hospital) reports a case of aortic aneurism apparently cured by galvano-puncture, followed by relapse on leaving the hospital. Dujardin-Beaumetz contributes further testimony to the value of electro-puncture in aortic aneurism, and also in favour of iodide of potassium. Paul, Potain, and Bucquoy also speak favourably of iodide of potassium and ice. Markham Skerritt, of Bristol, reports an abdominal aortic aneurism in which, owing to a variety of circumstances, distal compression was the only form which could be put in force. This was employed, and rupture into the retroperitoneal tissue resulted. Mr. Lund records a large axillary aneurism cured by digital compression; and Mr. Hulke one treated by rest and restricted diet beneficially. Mr. Croft records a popliteal aneurism rapidly cured by flexion and digital compression; another in which the elastic bandage interrupted at tumour was applied for an hour, followed by digital compression of femoral for six hours. Mr. Barwell, in a case of popliteal aneurism, after several futile applications of Esmarch's bandage, successfully tied the femoral with catgut antiseptically. Mr. Hebert Page and Mr. Lane, of St. Mary's, report similar cases. Dr. Ferguson, of the Cheltenham Hospital, records the successful treatment of a popliteal aneurism by a modification of Reid's method, viz.: by the proximal application of an india-rubber cord, about the thickness of the little finger twice around the limb. Several days of preparatory treatment by rest, restriction of liquids, and the administration of iodide of potash, as suggested by Balfour, preceded the application. Mr. Cornish reports an aneurism of the anterior tibial rapidly cured by Esmarch's bandage. Mr. Davies Colley records a rare case of spontaneous aneurism of the ulnar artery cured by ligation of the brachial. Dr. Gabrielle, of the Italian navy, treats varices by applying a thin strip of lead ($\frac{1}{2}$ line thick) over the veins with a roller bandage. Probably the simplest and most successful method is by the constant use of one of Martin's rubber bandages. The large subject of the dressing of wounds has been pretty fully ventilated this year, especially at the Paris Académie de Médecine. Advocates were not wanting for every imaginable method and adherents to one plan could see no virtue in another. The antiseptic men are daily growing stronger, but some follow Listerism, and others profess his creed but desert his practice. Some hold the Russian open-method to be most antiseptic of them all, as no discharges can be retained. Some advocate thymol and thymic acid, others, powdered charcoal and simple mud. Some regard moisture in wounds as the "*fons et origo mali*"; and the followers of Jules Simon and his pneumatic apparatus place their wounds *in vacuo*, for the air is poison. Alphonse Guerin and his disciples surround their wounds with a protective wall of cotton wool and swaddle the whole with interminable bandages; while a few, with Sampson Gamgee, at their head, look at the matter sensibly, fulfil apparent indications, secure rest and freedom from pain, and do not for a moment doubt Nature's ability to heal. Wiss again directs attention to Peruvian balsam as a valuable dressing; Mr. Furneaux Jordan highly extols the utility of sponge as a surgical dressing, and lauds terebene as an antiseptic application. Dr. Flashar, of Polknitz, reports favourably of sheets of carbolised intestine, asserting that cicatrization occurs rapidly beneath it. Mr. Spencer Watson has designed a very ingenious and not unsightly instrument for correcting deformities of the nose (it is made by Krohne and Sesemann). A case was this year reported at one of the London societies which had been diagnosed as a fusiform neuroma, but which at time of operation turned

out to be an abscess of the median nerve. Drs. John Duncan and Balfour speak favourably of acupuncture of the nerve in obstinate sciatica. Mr. Chiene, Mr. Bell, and Mr. Symington contribute further cases in support of nerve-stretching in this disease, as do also Drs. Macfarlane, of Kilmarnock, and Wm. A. Bird, of Quincy, Ill. Dr. Laurie, in the *Indian Medical Gazette*, reports thirty cases of anæsthetic leprosy, in which he employed nerve-stretching, with benefit in all. Dr. T. G. Morton, of Philadelphia, in January last, successfully treated an obstinate case of elephantiasis arabum, in which the femoral artery had once been tied without success, by section of the sciatic nerve. Huber records an instance of that rare form of sarcoma designated chloroma, in a girl aged twenty-one. It occurred primarily in the breast, and was removed. Death occurred from widespread recurrence seven months after its first appearance. Bouchut reports the successful treatment of cancer of the breast by compression of the gland by vulcanized caoutchouc and cotton batting. Langenbeck removed a cancerous tumour from between the pharynx and larynx, but the patient died from retention of mucus and discharge in the bronchi. Gies recommends parenchymatous injections of glacial acetic acid in carcinoma. Dr. Thin exhibited at the London Pathological Society a cancerous ulcer of the skin of forty-three years' duration removed by Sir James Paget. It was neither lupus nor epithelioma, but rather that rare form of disease which Verneuil has described as adenoma of the sweat glands. Billroth removed a lipoma, weighing forty-four pounds, from the back of a man seventy-one years of age: thirty-five catgut ligatures, and thirty-six sutures, and a drainage tube were inserted, the dressing conducted antiseptically, and the patient left the hospital on the eighteenth day. Mr. Bell, of Edinburgh, in an amputation of the breast, introduced a new method of drainage. A tube three feet long, perforated at upper end, was stitched into the wound, the lower end being placed in a six-ounce bottle half full of carbolic lotion (1 to 40):—loose gauze was packed around the tube to prevent the entranco of air. Horse hair and catgut have been favourably reported on as drains for wounds. Mr. Harrison Cripps has called attention to the infrequency with which it is necessary to ligate the common carotid for punctured wounds of the neck or tonsillar hæmorrhage. Ligation of external carotid almost always suffices in these cases, and if it do not, it is easy to extend the incision so as to reach the common carotid. At the Clinical Society this year, Dr. Yeo and Prof. Lister brought forward a case of papilloma of the larynx successfully removed by laryngo-tracheotomy. The true and false vocal cords were entirely removed, and yet (to everybody's surprise) the patient was able to speak, phonation being effected by vibration of the aryepiglottic folds. Tracheotomy by the galvano-cautery appears to remain in favour with the French surgeons, and some English surgeons have spoken favourably of it. Dr. Cheadle records a case of gangrene of the lung, following tracheotomy, for diphtheria. The child recovered from the diphtheria, but succumbed to the gangrene. No similar case has been recorded by either Jenner or Trousseau. Dr. Lewis Henry speaks highly of Bose's Tracheotomia Superior as a bloodless method of getting into the windpipe in children. This is now pretty generally adopted in Germany. Mr. Annandale records the successful removal of a rare œsophageal polypus by the ecraseur. Dr. McKeown, of Belfast, records a successful case of œsophagotomy for the extraction of a set of false teeth which had been swallowed. Trendelenburg reports a successful gastrotomy. By means of a tube running from the mouth to the gastric fistula, the boy is able to chew his food and blow it along the tube into the stomach. Mr. Harrison Cripps performed gastrotomy upon a case of acute intestinal obstruction in a boy. Injection and inversion had previously failed, and opium was administered. This was the mistake: the symptoms were masked by the drug and operation so long delayed that the patient was exhausted; a tight fibrous band was found constricting the bowel, and was divided; several feet of intestine were examined, but not more than a few inches exposed at a time, they being returned at the upper end of the wound as fast as drawn out at the lower. Diarrhœa set in, and death occurred on the eighht day from exhaustion. No peri-

tonitis found *post mortem*. Dr. W. C. Arnison, of Newcastle-on-Tyne Infirmary, performed splenotomy on the 29th of September. The spleen weighed seven pounds thirteen ounces. Death occurred five hours after operation, from shock rather than hæmorrhage, and transfusion of milk was without avail. Dr. Martin, of Berlin, reports a successful case of splenotomy in a hunchback woman who suffered from a wandering spleen. Dr. Marion Sims performed the operation of cholecystotomy on a lady in Paris on the 18th of April last. The gall-bladder was incised and the edges of the incision stitched to the abdominal wound. Sixty gall-stones were removed. The patient did uninterruptedly well for six days, but slight oozing of blood then occurred from the edges of the gall-bladder and from the mucous membrane of the stomach, these passive hæmorrhages being due to cholemia, and ultimately proving fatal. Mr. George Brown, of London, also performed cholecystotomy this year. His patient recovered sufficiently to go to church and to attend to household duties. Studsgaard, of Copenhagen, this year successfully removed a foreign body from the sigmoid flexure of the colon by abdominal incision. Mr. T. H. Walker records a case of rupture of the colon from the kick of a horse, with survival during twenty-one days; death appearing to be due to indiscretion, on the part of the patient in sitting up and smoking. Mr. Maunder places on record a couple of cases in which irreducible herniæ were rendered reducible by prolonged rest and diet. Dennis Dumont records two cases of intractable hernia (1 femoral, 1 inguinal) reduced by Esmarch's bandage. Mr. Wood records a case of irreducible omental hernia in which he operated, and also successfully performed his operation for the radical cure. Dr. Eben Watson has this year successfully performed Wood's operation for radical cure, as has also Dr. Tivy. Dr. Alexander Patterson records a rare and anomalous case of inguinal hernia in which he operated successfully. There was no vomiting, retching or hiccough, the tumour was hour-glass in shape, and the intestine had become almost gangrenous in ten hours. Dr. Wellington Campbell, of New York, records a case of femoral hernia in a man in which he operated successfully, and in which, although strangulated for ten days, there was no gangrene. Mr. J. Arthur Kempe, of the Great Ormond Street Hospital, directs attention to phymosis as a not infrequent cause of rupture in children. Prof. Kocher, of Berne, extirpated the left kidney of a child two and a half years old for a new growth. The tumour was removed through the abdominal wall as in ovariotomy, but the child died on the second day from peritonitis. Mr. Lucas reports a successful treatment of abscess of the kidney by aspiration. Dr. Brown, of Barnsbury, brought to the Islington Society a human bladder containing three stones, weighing in all 1¼ lbs. less 20 grains. Dr. Dunlop exhibited at the Glasgow Society a urethral calculus, weighing six drachms. Mr. Southam, of Manchester, records four cases of cystine calculi; though only now recorded, they were not met with this year.

(To be continued.)

THE THERMAL DEATH POINT OF SEPTIC ORGANISMS.—Some very careful experiments on this subject have lately been rehearsed to the Royal Society by the Rev. W. N. Dallinger. He found septic organisms living after exposure to a heat of 250° Fahr. He proceeds in his narrative:—I followed this with four more experiments, separately and successively made. Two of them were at a temperature of 248°, and two at 252° F. In both of the former, at the end of nine or ten hours, the complete organism in full vigor could be seen; and in one of the cases it was discovered in the still condition shown at Fig. 20, Plate 2, and watched until the organisms had attained the condition indicated in Fig. 24, Plate 2. But in the two latter instances (heated up to 250°) the living form did not reappear during the six days following, although repeatedly looked for. I concluded, therefore, that the temperature of 250° F. was the limit of endurance which the spore of this form could bear by this method of heating. Boiling water, therefore, would not destroy these germs.

TORONTO GENERAL HOSPITAL.—Dr. Zimmerman has been appointed pathologist to the Toronto General Hospital.

Selections: Medicine.

PROPHYLAXIS OF HEMIPLEGIA.

BY W. H. THOMSON, M.D.

(Concluded from our last.)

Another character of this diseased pulse, besides incompressibility, is that it is *long;* that is, it does not pass quickly and abruptly under the finger, but with an evidently prolonged vibration. A long pulse is the opposite, not of a rapid or frequent pulse, but of a *short* pulse. You may have a very rapid and yet *long* pulse, as in some dangerous convulsive states, like puerperal eclampsia, and, on the other hand, some very slow yet short pulses, as in some cases of anæmia. Whenever the arterial system is quite clear, and the blood can course freely through it, whether your patient be healthy, weak, or in a high fever, the pulse will be *short*, quickly passing under the finger; whenever, on the other hand, the outflow from artery to capillary and vein is obstructed in the artery, whether by nervous spasm or arterial disease, the pulse wave is retarded, and therefore prolonged.

Now, what is the explanation both of the incompressibility and the length of the pulse here? They mean simply that the arteries are constantly *over-full.* They are always in a state of tubes fully opened at one end and partially closed at the other, so that from narrowing or total obliteration of multitudes of the terminal vessels or arterioles by disease, the larger vessels are in a condition of chronic distension. With this reason for the incompressible pulse we have also the explanation of the long pulse, for, as we have just remarked, were the arterioles and capillaries all free, the pulse impulse would pass quickly through, whether the heart was beating slowly or rapidly, strongly or feebly, but the fuller the arteries, the longer does it take the wave to overcome the resistance of the dammed up current.

We are now prepared to answer the main practical question—What is it that has wrought this physical change in the arteries from the healthy state? and the reply, in nineteen cases out of twenty, is *toxæmia*, or chronic poisoning of the blood from deficient action of the excreting glands. In some cases the liver is largely responsible, owing to failure on its part to form urea, uric acid being generated in abnormal amount instead. An incompressible pulse is therefore very characteristic of gout, a disease of middle and past-middle life, and also occurs in children during and after scarlet fever, when, quite apart from nephritis, uric acid is often present in excessive quantity. But the most irritating blood by far, to the inner coats of arteries, is the poisoned blood of Bright's disease, and to such an extent is this true, that some authors ascribe three-fourths of the cases of hæmorrhagic apoplexy to granular kidneys. It is, however, by no means only those who have albumen and casts in their urine who have dangerous arteries, for often the blood becomes similarly contaminated, and the vessels diseased, in persons who, without habitually passing albumen, nevertheless habitually pass urine of *a low specific gravity.* Except in those cases of nervous disorders which are characterized by an abundant flow of limpid urine of a low specific gravity, such as cases of spinal exhaustion from excessive venery, a habitual condition of this kind in the urine is indicative of the damaged or imperfectly working kidneys, if not of cirrhosed liver as well; and such persons will be found to bear surgical operations very badly, to succumb quickly to fevers, and constantly to show, on examination, that their arteries are the very reverse of healthy. In fully-developed Bright's disease, of course, the arteries quickly turn hard and brittle at any period of life. I have noticed such blood-vessels in children who had this affection, and I believe that all recorded instances of hæmorrhagic apoplexy in children have had this element noted in their history.

With this statement of the condition which causes a liability to vessel rupture, we will conclude by enumerating the immediate exciting causes that may determine the occurrence of the accident itself.

First, such arteries are likely to be subject to the caprices of a more powerful heart than ever happens to healthy arteries. The heart has to increase in size and strength in order to balance the growing difficulty in the arterial flow; but unfortunately the poisoned blood of

Bright's disease often deranges the great nervous mechanism which regulates the distribution of blood, so that we may have, on the one hand, violent action of the hypertrophied heart occur; or, on the other hand, spasm of the walls of the arterioles with greatly increased arterial tension in consequence; or both together. Influences which would excite the vaso-motor nerve-centres only moderately in health, may act very immoderately in Bright's disease, and put the weakened walls to an excessive strain. Thus the first shock of a mental emotion, like anger or fear, causes paleness from sudden contraction of the arterioles, when the heart may begin to beat violently before the arterioles begin to relax. A fit of passion, therefore, often induces an apoplectic attack. Extreme cold weather also generally increases the list of sudden deaths from apoplexy in the obituary columns of the newspaper; for the lessened circulation of the skin not only increases that of the internal viscera, but the skin also ceases then its usual assistance to the function of the kidneys. Toxic disturbance of vaso-motor centres is moreover common during the latter hours of the night, as we find illustrated by the usual occurrence then of attacks of asthma, epilepsy, gout, nightmare, and uræmic dyspnœa, and hence also the many instances of persons found dead in their beds from apoplexy, especially in cold weather. Another common cause is the addition of a large element of nitrogenous food by a hearty meat meal, for it is well known that, in health, the kidneys immediately answer such an addition by a corresponding increase in the elimination of urea; but if they are embarrassed by disease, they may suddenly, and critically, fail to do so. On this account apoplectic attacks are especially frequent shortly after a meal. Congestion of the cerebral veins and sinuses by stopping expiration, as in lifting, coughing, vomiting, stooping, or in defecation, of course strain the cerebral arteries by retrograde action on the outflow; and lastly, we must be assured that the arterial system is not much diseased whenever we recommend a person to take Russian or Turkish baths. When the body is immersed in watery vapour, the skin can add from one to six pounds of water to the volume of the circulation in a few minutes, and on that account most people experience an unpleasant sensation of fulness of the head on first entering these baths, and which does not pass off until a free perspiration relieves the over-distension of the blood-vessels.

Besides the negative advice of avoiding or providing against the exciting causes of vessel rupture just enumerated, what measures should you recommend one to take in whom you find the signs of arterial disease?

First in importance, we may say, comes the subject of diet, for when the elimination of urea by the kidneys is imperfect, the nitrogenous element of food ought to be reduced to as low a point as is compatible with ordinary life. That nitrogenous food is consumed greatly in excess of the actual needs of the economy in the dietary of this country, is amply proved, not only by the contrast in the use of animal food between us and the Asiatics, for instance, but also by the prevalence among us of kidney disease. An animal diet, *cæteris paribus*, always increases arterial tension, and a vegetable diet diminishes it, and so soon as embarrassment of the kidneys occurs, this difference of effect between these foods becomes immediately exaggerated, somewhat like the exaggerated susceptibility to saccharine excess in diabetes. If the patient objects to entire restriction from meat, he may then be recommended to take it at one of the two earlier meals of the day, and not at night. The healthiest article of nitrogenous diet is milk, but used only as it is taken by the nomad peoples who have to live largely upon the milk of their flocks and herds. It is singular that the significance of the practice, universal, as far as I know, among such races, of artificially souring milk before using it, is not often alluded to in our books on dietetics. Among the Arabs, and in fact among all the different races of the Turkish Empire, sweet milk is hardly ever even tasted, while soured milk is used constantly, in many cases with every meal, constituting, next to bread, the chief food of the peasantry, and still more so of the wandering Bedouin or Tartar. As soon as the milk is brought into the tent from the cows, goats, sheep, asses, or mares, while yet warm, it has a certain proportion of sour milk

added to it from the previous day's stock, and the milk is then warmed slightly to hasten the fermentation. The *original ferment is derived from yeast*, and hence this artificial souring of the milk is wholly different from milk when it is left to sour spontaneously, for that, on the contrary, is the first step in its putrefaction. Now the superior digestibility of soured milk is due to the fact that the stomach is spared the task of curdling the milk itself, preparatory to its further digestion. The curdling of milk in the stomach must necessarily consume a considerable quantity of gastric juice, and many persons even in health, and *à fortiori*, most invalids, find their digestive secretions scarcely able to accomplish more than this initial curdling, so that the latter stages of milk digestion are so imperfect that they find this article constipating, or "bilious." This soured milk, however, I have never found indigestible, but, on the contrary, of especial benefit to phthisical patients, as well as in Bright's, and many other constitutional diseases. It can readily be made in this country by taking half a pint of fresh milk, all the better if still warm from the cow, and then warming it to a blood heat. Add to this two tablespoons of yeast. In six or eight hours it is curdled enough to take two ounces of it for curdling another half pint, and this is to be repeated till the fifth or sixth specimen has been soured, when the bitter taste of the yeast originally added, is no longer distinguishable. After this, milk may be soured every day from the milk of the previous day. This milk has a peculiarly pleasant acid flavour which I have found universally acceptable, even to those who were strongly prejudiced against milk in any form. It is best served well stirred, and eaten with bread, and may be sweetened with sugar, if so desired. Another agreeable form of using it is to hang up the soured milk in a linen bag till the whey is drained off, and then the residue used when about the consistence of whipped cream, sweetened with sugar, and spread, like butter, thickly on bread.

Fresh fish is better than meat, and eggs taken in moderation; but all vegetables (except asparagus), and all fruits, may be used freely. Of the beverages, tea and coffee can scarcely be regarded as injurious to any persons when used only once a day each, but a slight excess of tea is harmful in any case where the heart is much damaged, from its aggravating the flatulence and acidity of the congested stomach, and from its special tendency to derange the rhythm of the pulse. All alcoholic drinks, without exception, should be forbidden, and especially malt liquors.

In health, a walk in the open air immediately lowers the tension of the arterial pulse, or, as the common expression is, softens it. Let a patient with gouty, or even uræmic, blood, be examined before starting on an open air trip in the country, or at the seaside, and then afterwards, and the change from an incompressible to a soft, naturally compressible pulse is often surprising. So all muscular exercise lowers arterial tension, whether in health or in disease. This effect is plainly due to the increased oxidation of effete products by active respiration, and hence, next to temperance in eating and drinking, habitual good, free breathing is the best of safeguards against apoplexy or hemiplegia. You should warn such patients, however, against all forms of fatiguing exercise, for as a class they are poorly provided against the effects of overstrain of any kind.

The medicines best calculated to remedy arterial degeneration, and hence to be used as prophylactics of hemiplegia, are iron and the corrosive sublimate. With the steady employment of the latter agent, in small doses, I have repeatedly noticed the specific gravity of the urine increased, and a restoration of the normal colouring-matters and salts take place, while an improvement in the head symptoms, above mentioned, and a lowering of the arterial tension, has accompanied this change in a fashion too unmistakeable to be ascribed to other agencies. The dose should not exceed $\frac{1}{30}$th of a grain, three times a day, and is to be continued as long as no symptoms of mercurial disorder appear, when, if so, it may be intermitted for a while. Iron is the great respiratory food of the body, and therefore is to be given whenever we fear muscular degeneration. Muscular power is, in all animated nature, invariably proportioned to the activity of the respiration, and hence the exceptional strength of the muscles of insects. On this account, if you fear degeneration of the cardiac walls, or like change in the muscular fibre of the vascular system generally, this carrier of oxygen is one of the best of restoratives.—*N. Y. Record.*

POINTS CONNECTED WITH DIABETES.

BY F. W. PAVY, M.D., F.R.S.

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Such is the argument which leads us up to the consideration of glycosuria as a phenomenon of diabetes mellitus. I conceive it may be assumed that what is true for diabetes artificially induced may be taken as also holding good for diabetes of pathological occurrence. There is no reason to believe that the source of the glycosuria in the two instances is different, and it appears to me that support to this conclusion is given by the state in which the tongue is found in the most aggravated cases of the disease. Frequently, for instance, it may be noticed that the tongue presents an exceedingly injected appearance. Its bright red colour points to the existence of a hyperæmic state—the state that would be occasioned by a vaso-motor paralysis. The idea suggests itself from the aspect presented that the blood is flowing through the organ without being properly deprived of its arterial character. Now, just such a condition existing in connection with the chylo-poietic organs would suffice, as I have furnished evidence to show, to give rise to glycosuria. That the tongue, belonging as it does to the digestive system and the chylo-poietic organs, should be affected alike is nothing for us to be unprepared for. It is in the worst kind of case, as I have said, that the tongue presents the appearance indicated, and the tongue being thus implicated may be taken as simply expressing the existence of a wider extent of vaso-motor paralysis than where no such appearance is noticed.

The problem remaining to be solved is the nature and seat of the lesion of the nervous system, which forms the primary morbid condition in diabetes. There are various considerations connected with the disease which point to the brain as being the most likely part from which the morbid influence starts. We know that by operating upon the medulla oblongata and the sympathetic system diabetes may be artificially induced ; but it is not necessary that attention should be confined to these structures, for it is also known that in them only resides a part of the vaso-motor system. The observations of Eulenberg, which are corroborated by those of Brown-Séquard, have shown that the state of the arteries is affected by lesion of certain parts of the grey matter of the brain, and it is suggested that the vaso-motor nerves distributed in the sympathetic, besides being connected with the spinal cord and the medulla oblongata, pass up to spots at the surface of the brain, which stand in the position of cerebral vaso-motor centres.

I certainly incline to the opinion that some kind of textural change in the brain stands at the foundation of diabetes, and there are two ways in which the effect may be produced. The vaso-motor system exerts an influence upon the arteries, which gives them their *tonus*, or keeps them in a certain state of contraction. The effect of destruction of the centres or tracts is to lead to arterial dilatation, by causing direct paralysis of the muscular coat ; whilst that of irritation is the converse. These results are in harmony with what occurs under similar circumstances in connexion with the cerebro-spinal system, and are therefore intelligible enough to us. Arterial dilatation, however, may be induced in another way—viz., by an action of the cerebro-spinal system controlling or inhibiting the activity of the vaso-motor system. Reference to what may be perceived in connexion with the salivary glands will supply us with an illustration of the occurrence of this mode of dilatation.

Whilst the glands are in a state of quiescence, the arteries are maintained in a comparatively contracted condition by the influence of the vaso-motor nerves they receive from the sympathetic. Now common observation shows us that a flow of saliva, which means an antecedent dilatation of the arteries, may be excited by a stimulus applied to the surface of the tongue, and so influencing the extremities of the lingual gustatory nerve, and even by an impression starting from the brain and originating in a passing thought about food. The explanation which physiological science gives of this phenomenon is that a stimulus is transmitted from the cerebro-spinal system which produces an inhibitory action upon vaso-motor centres or nerves that relaxes the muscular coat of the arteries, and thus permits dilatation to occur. This may be considered to constitute an active form of vaso-dilatation, in contra-distinction to

that arising from paralysis induced by operations upon the sympathetic, which lead to a simple removal of vaso motor influence.

There being these two modes of action by which vaso-dilatation may be brought about, it may happen that diabetes may arise either from a lesion affecting and involving a loss of power in vaso-motor centres, or a lesion in some part or other of the cerebro-spinal system leading to an inhibitory influence being exerted upon them.

Dr. Dickinson states that he has recognised certain vascular and perivascular changes in the brains of those who have died of diabetes. My colleagues, Drs. Frederick Taylor and Goodhart, however, in an article "On the Nervous System in Diabetes," published in the Guy's Hospital Reports for 1877, have disputed the validity of his conclusions. The point in question is out of my own line of investigation, and I cannot therefore pretend to offer an opinion upon it; but this much I may say, that I hope in the interests of science Dr. Dickinson will continue and extend the inquiries he has begun, for I am sure it will be admitted that he possesses qualifications which especially fit him for such work. The ground I consider has been prepared by physiology, and we must now look for the fruits derivable from the assistance of pathology.

I may state, and I desire that the statement should only stand for what it may appear to be worth, that my clinical experience has led me to form the idea that diabetes presents an alliance as regards the character of its progress to locomotor ataxia and progressive muscular atrophy. We have in each of the cases different manifestations of disordered nerve-action to deal with; but, as in the diseases named, diabetes, certainly as it occurs among young subjects, is a truly progressive affection. For instance, when such a subject falls under observation during the early period of the disease, it will be found that by dietetic management alone the urine may be deprived of sugar and the health restored. Later on sugar reappears, notwithstanding the most rigorous dietetic management be persistently adopted. It may happen now that the administration of opium, morphia, or codeia will again remove the sugar. Again, however, the urine becomes saccharine, and the saccharine character gradually augments. With this the patient notices that he is losing ground in general health. He experiences more or less of a return of the old symptoms which troubled him at the outset before his eyes were opened to the nature of his complaint. No impression can now be made upon the disease as formerly, and it appears to me we can only assume that the pathological condition which is at the bottom of it must have gradually advanced. The ordinary duration in these progressive cases, I think I may say, is about two years. Sometimes it is much shorter, sometimes longer; and, as in locomotor ataxia, the condition may advance to a certain point, and there remain stationary for a shorter or longer while, the patient during this time being able by strict attention to treatment to keep himself in a fair state of health. These remarks do not apply to the disease in elderly persons, for here, if the proper management be pursued, the tendency is towards progress in a right direction, if not even recovery, instead of towards an unfavourable issue.

This brings to a conclusion the remarks which you, Mr. President, by the honour you conferred upon me in appointing me to deliver these lectures, have afforded me the opportunity of making upon a subject which has always been of much interest to me. Whatever may prove to be the final issue of the investigation, the views I have expressed are those which, after a close attention to the subject for now upwards of twenty years, I have been led, rightly or wrongly, to frame.—*London Lancet.*

Treatment of Psoriasis.—M. Galuzinsky, in the St. Petersburg *Med. Wochenschrift*, recommends highly crystallized carbolic acid ʒij, dissolved in ʒj of collodion, and brushed over the affected portions of the skin. When the eruption is limited, it may be all brushed over at once, but where it is extensively diffused, a gradual application is preferable, say one day an arm, and after two or three days the other arm, or foot, &c. The application is not repeated as long as the collodion remains fixed to the skin. The application must continue as long as the eruption is red and infiltrated. The treatment, on the whole, may require two, three, or more months.

Original Communications.

MEDICAL EVIDENCE OF COURTS OF LAW.

BY DANIEL CLARK, M.D.,

Superintendent of the Asylum for the Insane, Toronto, Ontario.

(Continued from our last.)

Dr. Forbes Winslow, in his "Anatomy of Suicide," says:—

A man may allow his imagination to dwell on an idea until it acquires an unhealthy ascendency over his intellect. Surely, if, under such circumstances, he were to commit a murder, he ought to be held as a murderer, and would have no more claim to be excused than a man who has voluntarily associated with thieves and murderers until he has lost all sense of right and wrong: and much less than one who has had the misfortune of being born and bred among such malefactors.

This wide definition could not be of practical benefit, because bias, confirmed habit, hereditary wickedness, oddity and peculiarities may be normal and the natural out-crop of successive voluntary acts by our progenitors or ourselves. In other words, they are not the products of physical or mental disease, and are more or less the inheritance or acquisition of every one. This law of interpretation would include a large number of the insane as responsible beings. There are times in the lives of many lunatics when they not only know right from wrong (the distinctive Shibboleth of so many judges to the present day), but also when they can refrain from wrong-doing, for fear of punishment, as rational beings do in every day life. They can curb the insane impulse by volitions which are within their control. Should they be exempt from penal consequences? The asylums are full of inmates, who for weeks together, are—as far as human knowledge goes—comparatively sane. Their insanity is periodic. In the intermissions of sanity such have full control over all their acts, and are cognizant of their relationship to society. The equilibrium of the mind at such times, as far as we can judge, is maintained, and such are quite capable to transact business, to bear injuries with equanimity, and forbear from any overt acts as any perfectly sane citizen. If at such times, and during such intermissions the individual commits a felony, should he be held responsible and punished for his crime? I am well aware that objection may be raised that during these so-called "lucid intervals" the mind does not fully recover its normal tonicity. This may be true to some extent in many cases, but if the mind have not all the strength of a totally sane man, in vigorous mental health, it has sufficiently recovered, at these times, to perform all its necessary work in the same manner and within the same control as the great majority of mankind. It is proposed to medical men, in view of these difficulties, to confine the definition of insanity to mean brain disease. In this way the question of responsibility would still remain with the Court. If by disease is meant organic lesion, then would the definition be too limited: for functional derangement will dethrone reason for a time. This is seen in the inhalation of anæsthetics, in drunkenness, in the wild delirium of fever, and in the effects of many other toxical agents. The brain may become affected functionally, because of excitement in one or more distant organs of the body. This is seen in the kleptomania of women at certain menstrual periods. The woman who revels in wealth will become a thief at such times, who would revolt at the thought when the frenzy passes away. It is the love of stealing, not the pleasure of possession alone, that prompts the act. We see the same eccentric causes in puerperal mania, at the climacteric of female life, hysterical mania, nymphomania, and such like, which may in their initiatory invasion be excitants and the cause of permanent lesion of the brain in the long run, but none can say that the mischief has not begun outside of the brain. Disease of the brain will cover the large majority of the insane. Disease of the body, outside the brain, will show an efficient cause in many. The two combined make a good majority in our asylums, but to say that lesion of the brain only is a complete definition of insanity would not be in accordance with experience. *Post mortems* often show extensive adhesions inside the skull, and serious invasion of disease in the substance of the brains of those who have died of other bodily diseases, but sane to the last. Also many an insane person dies and leaves no evidence of mischief in the head.

The exciting cause may affect the encephalon from without, or it may be beyond the research of the pathologist, and cannot be a basis to support the definition above given. Even if this definition were correct, it would be impossible to state when it existed except by mental and physical manifestations; then why not accept a formula like that of the German Penal Code, viz.: "An act is not punishable when the person at the time of doing it was in a state of unconsciousness, or disease of mind, by which a free determination of the will was excluded." This does not reject the idea of bodily disease, but it takes the outward manifestation as an indicator of the mischief within, just as the hands of a watch point out the condition of the machinery within. It is a question of *will not* and *can not*—of voluntary or involuntary action—or, in other words, had the accused in any particular act sufficient mental strength to control his actions at any time he wished, or was he led blindly and irresistibly, from any cause, to conduct unnatural and unusual for him to do? Properly speaking none are absolutely free. Inherited predisposition, educated bias, confirmed habit, hobby-riding, well-fed ambition, and such like, are manacles to impede volition. The free will of a sane man must always be considered in a a modified sense, for the ball and chain are hanging at our limbs, as we are paying the penalty for the transgressions of ourselves and ancestors.

The medical witness is to remenember, however, that it is not his province to give a general definition of insanity. He is often entrapped into an attempt to do this, in order to give a council an opportunity to hold him and his opinions up to ridicule. He is asked in derision, "What is insanity?" but he can retort by demanding the catechist to define one of the terms his own question. The discussion of insanity in the abstract must be left to essays and textbooks. Only facts and legitimate opinions, deduced from them, are asked for to enable the Court to decide for itself whether they are such as to warrant the plea of insanity on behalf of the person under consideration. The witness is to guard against being led into defining the insanity of any one, as being a want of power to distinguish *right* from *wrong*. True, many insane people have not that discrimination, but, on the other hand, a large percentage of lunatics have that power as fully as the sound in mind. No jurist, who has the slightest experience of insanity, now holds that view, because it flies in the face of accepted facts. An illustrious race of English judges, for centuries past, and down to this hour, pronounce verdicts based on this inadequate judgment. On examining recent charges to the juries of Canada, I see indications of changes of opinion, in this respect, among our judges, which are more in keeping with the truths of modern investigation.

In the Toronto Asylum there is an estimable lady who is afflicted with religious melancholy. She has made several attempts at suicide. She never loses her sense of "the wickedness of the attempt," as she calls it, but the uncontrollable impulse is too strong for her. On one occasion recently she felt a strong desire coming on, and begged to have the leather muff put on her hands, lest she might be forced otherwise to accomplish her design. The courts would hold her to be an accountable being, because the sense of right and wrong had not been extinguished. A powerful mulatto is in the refractory ward, who is constantly persecuted with spirits. He has, intermittently, a longing to kill somebody. He knows it is wrong to even think so, and at these times he asks the supervisor to lock him in his room. According to the interpretations of law, should he commit homicide, he ought to be hanged. In another ward is a patient who was at one time a prominent writer for the press. He is afflicted with chronic mania of the most pronounced kind. On a recent occasion he told me that he "felt like wanting to kill" one of the patients, against whom he had taken a dislike. He said he knew it was wrong to think so, but cunningly added, "You know I am crazy, so they wouldn't hang me." If, unfortunately, such homicide should take place, he should be hanged according to law. Dozens of such cases could be cited in any of our asylums. Dr. Hammond, a reputed expert on insanity, an extensive writer on the subject, at one time Surgeon-general of the United States Army, and now associate editor of *The Journal of Nervous and Mental Disease*, said recently in a

discussion which took place on this subject, at a meeting of the "Medico-legal Society of New York," "that he is in favour of punishing insane people just as he would a tiger who went about destroying people. If a lunatic had a homicidal mania he would hang him."* He would not only hang *any* and *all* insane people who killed any one, but he would hang them if they had a mania to kill, even were the deed not performed. This would be an effectual way to make vacancies in our asylums, and would remove perplexing problems from courts of law to the scaffold and the grave. I am sure such a brutal idea will never prevail where humanity exists. One of the theories of the transmigration of souls was that some one died when each mortal was born, and the soul of the dead was immediately translated to the new-born child. I am afraid no one died when Dr. Hammond was born. I take this charitable view of the author of such a horrible proposal.

There is reason for caution in a witness when he is asked to acknowledge that peculiarities of mind may mean insanity and irresponsibility. A man may do a great many strange things and still have perfect soundness of mind. There is no common standard to measure mentality with analogous to the yard stick and bushel in the British Museum. Each man must be gauged by himself, in his antecedent conduct and individuality, for among all the sons and daughters of Adam, no two are alike in body and mind. No man can be justly tried by a code of laws which indulges in vague generalities, on the one hand, or which vaunts an absurd minute classification on the other. What may seem odd in a naturally quiet and reticent man may be the usual conduct of him who is "boiling over" with exuberance of spirits. The temperament, peculiarity, bias, habit and mode of thought, of each person must be considered in relation to each history. To expect a uniformity in humanity, and judge that one man must act like any and every other man, is the greatest absurdity. This want of sameness must forever bar the way to finding a general definition of insanity. The conditions are too multifarious for us ever to prove mental *status* with formulæ as definite as those of Euclid.

A witness should not allow himself to be led into a trap by having proposed to him one symptom at a time, and then be asked if each of those indicate insanity. Each symptom might not be characteristic in itself, when the aggregate might be conclusive. When details are asked for the witness must guard himself by insisting on their accumulated weight, to enable him to form an opinion. This may not be necessary in acute cases, when the patient's actions speak louder than words, but the sum total of symptoms is of great importance when the indications are obscure. Many times it is impossible to express, in words, the gait, mode of expression, look, and general demeanour of an insane person, so as to impress a court with their forcible significancy. Take an example of one of many found in any asylum. A person was once tidy in his habits; is now slovenly. He had a firm step; he has now a shuffling gait. He never docorated his person; he now makes a ring of some material for his finger, or ties it in his button-hole. He was not a keen observer of small things; he now notices and picks up pins, nails, straws, bits of glass, or any other small object that may come in his way, placing them in some corner, in his pocket, or in any other part of his clothing. He may have had distinct utterance; but he has lost that clear enunciation of words and mumbles them out. He was inquisitive at one time as to what was going on around him; he may now listen to a recital of stirring events and take a momentary interest in them; but it is of short duration. He was active and industrious; but he is now lazy. This recital might be extended indefinitely, but in short, there is a perversion of the patient's whole character. The medical witness sees a case of dementia, yet, each of the symptoms taken *seriatim* would have no significance, being without salient points, to an unobservant jury, and even the combined catalogue would have little force or weight in many courts of law. There may be no delusion apparent; there may be a sense of right and wrong. Sharp questionings may elicit correct and intelligent answers, but a number of changes of character, such as I have enumerated,

* *The Journal of Mental and Nervous Diseases*, July 1878, p. 556, *et seq.*

pronounce an unsound mind: or rather a physical disease has instrumentally impeded the healthful exercise of mental vigour. The ancient aphorism holds true amid all the fluctuations of mental philosophy, *i.e.*, "a sane mind in a sane body." The appearances of disease may be faint when taken in detail, but to a practical eye, and to a matured judgment, accustomed to study the faintest outcrop of mental aberrations, those peculiarities tell a tale which may have no weight with the unskilled in the protean forms of insanity.

It is sometimes insisted upon that a categorical answer may be given to every question put to a witness. It may be impossible truthfully to do this, because of the form in which the interrogation is put. The examiner is well aware of this fact, hence the bait cunningly thrown out to catch the unwary. For example, were it asked about a patient, "Did he then refrain from speaking nonsense?" Were the answer "yes," it would imply that he had been speaking it, but had ceased to do so. Were the answer "no," it would mean that he had spoken nonsense, and continued to speak in the same strain up to the time under discussion Neither answer might be true, for if the patient had not spoken at all, as indicated, the fallacy lay in an assumption which had no existence. It would be begging the whole question, and neither a positive nor a negative answer could cover the ground. This is only one specimen of a legion of such questions which often perplex beginners, and are expounded with that object in view, and a negative or positive answer demanded with legal pertinacity. When such traps are set and baited with sagacious design, a state of "masterly inactivity" is best, until the questioner goes back to legitimate interrogation. A medical witness should never quote authorities, nor should he be entrapped into endorsing or refuting such, if they should be presented by council for his consideration. No published books on medical subjects are competent witnesses in court; nor is a witness compelled to give an opinion about the views the authors may advance. The writers themselves are the only legitimate persons who can testify to their theories and beliefs. I have often seen witnesses caught in this way, even before the opposing council could put a veto on the irregularity. "Do you agree with Maudsley in his view on this point?" "How does it happen that Bucknill and you differ in this respect?" "Can you give me Tuke's opinions on the subject under discussion?" "In Ray's Jurisprudence such and such theories are advanced, what do you think about them?" "You have read Taylor, will you state what he says about insanity in respect to competent wills, or suicide, or homicidal mania?" These are specimen interrogations which may be put, but need not be answered. A refusal to do so will be sustained by the Court. If a witness begins to air his medical lore by quoting authors, he may be able to show his possession of good memory, but he will not contribute any *facts* of which he is cognizant, through giving lectures on the opinion of others.

The most difficult position a medical man can be put in is when called to give evidence in cases of contested wills. The capacity of a testator to make a will, and the soundness of mind requisite to make a valid one, are often questions of great difficulty. It should be held generally as essential that the testator should have sufficient mental capacity to comprehend perfectly the condition of his property, his relation to the persons who were or might have been the objects of his bounty, the scope and bearings of the provisions of his will, and a memory of an activity sufficient to collect in his mind, without prompting, the particulars or elements of the business to be transacted, and to retain them in his mind for a period sufficient to perceive at least their obvious relations to each other, and to be able to form some rational judgment with relation to them. (*Vide* Rokenbaugh on Testamentary Capacity, *Journal of Nervous and Mental Disease*, July, 1878.) This test will cover all the ground. It does not assert incapacity to eccentric testators, nor those who may be labouring under delusions of facts. Esquirol says: The brain may be affected, but it does not necessarily mean an impairment of the understanding. On the other hand, it was strongly asserted by Lord Brougham, and is now by a certain class of thinkers, that *any* insane delusion entirely destroys the mental capacity of a testator to

make a competent will. Lord Brougham tells us that when travelling in the north of Europe he at one time was taking a bath at his hotel. As he came out of it he saw a friend in the room who at that time had died in India. He says he became insensible immediately afterwards. This apparition was doubtless the premonition of a fit. His lordship would not have agreed to have the rule of incapacity applied to himself on account of this hallucination. Lincoln had many delusions, so say his biographers. Sir Walter Scott was not exempt from them when he was in the zenith of intellectual vigour. Dr. Johnson heard his mother calling out "Samuel." Lord Castlereagh, the brilliant but corrupt statesman, often saw a beautiful child in his chimney-corner. Goethe also positively asserts "that on one occasion he saw distinctly his own double"—or himself outside of himself. General Rapp tells us that Bonaparte saw a star of great brilliancy above his head. Napoleon said: "It has never abandoned me; I see it on all great occasions; it orders me to go forward; and it is a constant sign of good fortune. Malebranche, Des Cartes, Luther, Wesley, Knox, Pascal, Loyola, and many of the most remarkable men of the past ages were the victims of all kinds of delusions and illusions. Yet, these children of genius could not be properly called lunatics, even if genius be said to be nearly allied to madness. There is no doubt, in my own mind, that all such deceptions of the intellect or senses often exist without mental aberration being present of sufficient intensity to invalidate a will.

"At the same time in the consideration of every case imbecility, delusions, monomania, or hallucinations, intoxication, lucid intervals, undue influence or fraud, and presumptions arising from the character of the act itself, the age of the testator, and such bodily infirmities as deafness, dumbness or blindness," must be well weighed in considering testamentary capacity. Eccentricity is said to be the lowest form of insanity. It is seldom however, that a will is invalid because of its existence in the testator. In 1861, a wealthy Portuguese died in Paris. He left a will with seventy-one codicils. One of which read, "I leave for the Athenæum of Paris 10,000 francs, and the half of the interest shall be paid to a professor of natural history, who shall lecture on the colours and patterns of dresses and on the characters of animals." Another was, "My funeral shall take place at 3 p.m., the hour at which rooks of the Louvre come home to dinner." The will was held to be valid, the Court saying "that these peculiarities were but the absurdities of a vain man." The peculiarities of the eccentric are as varied as are the phases of the mind, and it has been well said by Redford, in his "Treatise on Wills," that "The *eccentric* man is aware of his peculiarity and persists in his course from choice and in defiance of popular sentiment; while the *monomaniac* verily believes he is acting in conformity to the most wise and judicious counsels; and often seems to have lost all control over his voluntary powers, and to be a dupe and victim of some demon like that of Socrates."

Without entering into details, which would need a volume to elucidate fully, it is well in every case to consider whether the aberrations are such as would warrant us to sign a certificate of insanity to commit to an asylum for treatment and safe-keeping. If we do not consider such to be safe at large, they are not responsible beings. We should examine as to delusions and ascertain if they are sufficiently strong to warp the judgment and seriously affect the conduct of the individual; or, if they are of such an insulated nature as not to interfere to an appreciable extent with volition, and are not joined with morbid emotions and sentiments. It is also important to observe if the moral feelings and passions are perverted, if measured by a common standard, or better still by the patient's former temper and character, and if these are sufficiently morbid as to affect the power of self-control. The impulsive form of insanity is to be examined with great care, for under its guise real culprits take shelter to avoid just penal consequences. The strongest evidence of its existence should be made manifest to a medical witness before he testifies to the presence of mental disease in such cases. If these cardinal points are kept in view, an aid to intelligent testimony will be the result.

THE ANTISEPTIC TUBE IN INTRA-ABDOMINAL SURGERY.

BY A. GROVES, M.D., FERGUS, ONT.

In this article I propose to show why the tube sometimes inserted into the abdominal wound after intra-abdominal operations should be called the antiseptic tube, and not the drainage tube, as it is usually named. It may be said that there is little in a name, and that "the rose by any other name would smell as sweet." Well, so the rose would, but if any one were to say that some substance—assafœtida, for instance—had an odour like the rose, and that he were to say this to one who knew nothing of assafœtida, he would create a totally wrong impression: and first impressions are hard to change, unless their incorrectness is glaringly apparent.

Now, when we speak of drainage, either by street sewers of brick or abdominal sewers of rubber tubing, we ought, from the ordinary signification of the word, to mean that the process of drainage in both cases is similar; that is, that the offending fluids, in the one case, from the town, in the other, from the abdominal cavity, were got rid of by flowing down an incline, by reason of the tendency of fluids to find their level. But, in reality, the term drainage tube means nothing of the kind, or, if it does, it sadly belies its meaning, and the surgeon who places a tube in the abdomen, fondly believing that he has provided against the danger of septic poisoning, will be as much deceived as he who is told that the odour of asafœtida resembles that of the rose. I maintain that it would be much better never to use a tube at all than to use one if it is supposed that it will, of itself, carry off septic matter, for this it certainly will not do, while it may be the means of allowing septic poison to travel into the abdomen. Let any one place one end of a piece of rubber tubing, such as is commonly used as a drainage tube, in a pail containing water, and leave the other end on the floor; now, if we have a real drain or sewer, the pail will be emptied in a short time, but, as hour after hour passes, the water in the pail gets no lower, simply because it cannot of itself run uphill. If, then, a thin fluid like water cannot run up through the tube, how can we expect a much thicker fluid to run up out of the abdomen, for it must run upward before it can escape. It might, probably, be answered that it was on the siphon principle; but, then, a siphon will not start of itself, it must first be filled; and, undoubtedly, if the tube placed in the pail were first filled, it would soon empty the pail, or would keep running so long as the end in the pail was kept covered with fluid, but let this end be once uncovered, and it would at once stop, and would not start again.

Precisely the same thing happens in the so-called abdominal drainage tube; it will never begin running unless it is first filled, and it will cease as soon as the abdominal cavity is emptied; so that if there was a collection of fluid in the abdomen so great as to cause ascent in the tube by pressure from within, all the fluid then in the cavity might escape, but what collected after would remain. Now, it might be said that this is only theory, and that in practice the tube works very well, but it was because I found it useless in practice (as a drainage tube) that I became thoroughly awakened to the fact that what is ordinarily called a drainage tube does not in reality act in the way one would suppose from the name.

To show that members of the profession are led astray by a name, I may mention that I have seen reports of cases of intra-abdominal operations carefully performed with all antiseptic precautions, including a rubber drainage tube left in the abdominal wound. By-and-bye, symptoms of septic poisoning set in, and the patient died, in spite of antiseptic surgery and drainage, and the *post mortem* revealed a quantity of septic fluid in the peritoneal cavity. This is not theory, but a stern and fatal fact, which should rouse every surgeon who undertakes such operations to ask himself if death in such a case is unavoidable.

The answer, in the majority of cases, may be that the septic poisoning of the blood can be controlled and the patient saved. Virchow shows that blood will not retain septic matter, but will become pure, if there is not a septic depot pouring in poison continually.

I now come to the proper use of the antiseptic tube—a use long since pointed out by

Peaslee—which is, that as soon as symptoms of septicæmia begin, a weak antiseptic fluid should be injected into the abdominal cavity, and then allowed to flow out, and that this process should be repeated until the fluid flows out clear. The septic symptoms will almost immediately disappear, only to return within a few hours, when the antiseptic washing must be repeated. This must be repeated as often, and continued as long, as symptoms of septicæmia become developed. I think that by this means septicæmia ought, in almost every case, to be controlled; at any rate, it ought to be recognised that a collection of putrid fluid found in the peritoneal cavity, on making a *post mortem* examination after ovarian, or other intra-abdominal operations, shows either misconception, on the part of the surgeon, of the nature of septicæmia. or that he has been led away by a false name, and thinks that a piece of rubber tubing, thrust down into the abdomen, is the very utmost the modern practitioner can do to ward off the terrible dangers of septicæmia, when it develops in spite of antiseptic precautions.

It may be contended that the name (drainage tube) does not prohibit its being used for antiseptic injections. Of course, this is true, but I am quite certain that the name has led many astray, and that lives have been lost, because the name conveys the idea of drainage, when it should convey the idea of washing out septic matter and destroying its poisonous effect.

I am afraid this article has become too long, but my excuse must be the intensity of my conviction that patients have been lost on account of a misapprehension of the proper use of the misnamed drainage tube, and that by substituting a name which would at once draw attention to what is the only use of the tube, namely, to inject antiseptics and draw off septic matter, a great advance in the right direction would be made.

In conclusion, I might say that it is my firm conviction that the proper use of the antiseptic tube, after ovarian and kindred operations, is of greater importance than the performance of such operations under the antiseptic spray, at least, in the hands of the ordinary practitioner.

Book Notices.

The Local Treatment of Eczema. By Henry G. Piffard, M.D., New York.

On a New Modification of the Anterior Splint. By Roswell Park, A.M., M.D., Chicago.

Clinical Lectures on Surgery. Delivered at Starling Medical College by J. H. Pooley, M.D., Columbus, Ohio.

The *American Bookseller* for Christmas, 1878. American News Co., New York. Vol. VI. No. 10.

Ninety-sixth Annual Catalogue of the Medical School (Boston) of Harvard University, 1878-79. Cambridge, U.S., 1878.

Fourth Annual Report of the Officers and Superintendent of the Asylum at Walnut Hill, Hartford, Conn., 1878.

Les Tumeurs Adénoïdes du Pharynx Nasal—Leur Influence sur l'Andition, La Respiration, et la Phonation—Leur Traitement par le Dr. B. Lœwenberg. Paris, 1879.

The Duties of the Medical Profession concerning Prostitution and its Allied Vices. By Frederick Henry Gerrish, M.D. Portland: Loring, Short & Harmon. 1878.

Ecole de Médecine et de Chirurgie de Montreal, Faculté de Médecine de L'Université du Collége Victoria à Montreal.—Discours prononcé a la Réouverture des Cours par T. E. D'Odet D'Orsonnens, M.D.

Science and Practice of Surgery. By Frederick James Gant, F. R. C. S. London: Baillière, Tindall & Cox; Philadelphia: Lindsay & Blakiston; Toronto: Willing & Williamson.

The first edition of this work was not so generally known to the profession in this

country as it should have been; we therefore hope that the second edition, which is now before us, will receive the attention it deserves.

The old work has been so thoroughly revised, and so much has been added to it, that the author is quite justified in saying that "the present edition may be regarded as a new work." It is neatly printed in two volumes, and contains 1,787 pages and 969 woodcuts.

After a general introduction, he divides the work into—I. General Pathology and Surgery, comprising Diseases of Nutrition, of the Blood, and of the Nervous System; II. Special Pathology and Surgery, comprising Diseases affecting Textures, Organs, and Regions. The general arrangement is good, and in working out the details, he gives his own opinions and the results of his experience with an unusual absence of egotism, and, at the same time, gives clearly and concisely the views of the ablest surgeons and pathologists of the present day.

The following chapters on special subjects have been written by surgeons recognized as authorities in those departments:—"Injuries and Diseases of the Eye," by Mr. Power, Sen. Ophthalmic Surgeon to St. Bartholomew's Hospital; "Ear," by Mr. Purves; "Diseases of the Throat and Larynx," by Dr. Morell Mackenzie; "Deformities," by Mr. Wm. Adams; "Diseases of the Skin," by Professor Erasmus Wilson; "Diseases of the Female Genital Organs," by Dr. Robert Barnes; "The Sphygmograph," by Dr. Mahomed. These names are a sufficient guarantee of the value of the articles. The chapter on the sphygmograph deserves special mention. It explains fully the action of the instrument and its importance in indicating the various characters of the pulse under different conditions.

In his introduction, he discusses modern surgery as a science and a scientific art, and attaches great importance to the study of pathology, combined with that of anatomy, as a guidance in surgical operations, giving as one of his examples a case of aneurism of the axillary artery requiring a ligature of the third portion of the subclavian, and showing, on the one hand, the ease with which it may be done, in the dead subject when no abnormal condition exists, and, on the other hand, the difficulties which the surgeon must encounter in a living subject, when the disease has caused elevation of the shoulder, turgid veins, swollen muscles, etc.

In his classification of tumours, he recognises two primary divisions—the localized, or non-infiltrating, and the infiltrating, which includes all varieties of cancers. Under sarcoma (one of the localized growths), he includes fibro-cellular, fibrous, cartilaginous, gliomata, myxomata, and granulation tumours. We think that, when used in this sense, the term becomes so indefinite as to be practically useless. The more common plan of considering sarcomata as tumours composed of embryonic connective tissue, while it is founded on an anatomical basis, at the same time possesses more clinical value.

We were much pleased with his chapter on fractures, in which he draws largely from American surgeons, especially Hamilton and Sayre. As a general thing, his directions for treatment are practical and complete. There is one exception, however, where the treatment of the three varieties of fracture at the upper end of the humerus—intra-capsular, extra-capsular, and fracture of the great tuberosity—is disposed of rather vaguely in five lines.

In discussing diseases of joints, he is strongly opposed to the opinion of Dr. Sayre, that the "so-called" scrofulous disease of joints is not generally of constitutional origin. We quite agree with Mr. Gant, and think it of paramount importance in these cases to improve the condition of the system by constitutional remedies. We are certain that Dr. Sayre does not overlook these; but our fear is that some of his enthusiastic disciples, while attempting to rival the wonderful ingenuity of their master in the adaptation of mechanical appliances, may allow their patients to die through the neglect of the proper constitutional treatment.

We notice a good feature in the chapter on hernia. It contains a full description of all the ordinary trusses used in treatment, with a discussion of their comparative merits under different circumstances, and the proper way to take the necessary measurements for them.

The practical anatomy of various important

parts is given in different portions of the work. We would especially call attention to the surgical anatomy of the genito-urinary organs at the commencement of the excellent chapter on that subject.

In concluding this hurried review of Mr. Gant's *Surgery*, we take much pleasure in referring to the excellence of a large number of woodcuts. The greater portion are entirely new, and are, to a large extent, taken from the pathological specimens in the various London museums. Among so many, it is hard to particularize, but we will mention a few :—One showing destruction of the grey substance of the cord in tetanus, as demonstrated by Lockhart Clarke ; several in the chapter on fractures, showing the various situations and lines of fracture in different bones ; representations of aneurisms ; Francis Mason's drawings of cleft palate and the different steps of Sir Wm. Fergusson's operation for that deformity ; application of Sayre's plaster of paris jacket for angular curvature of the spine ; specimens of numerous forms of hernia ; varieties of trusses and their application ; stricture of the rectum ; fistula in ano ; strictures of the urethra, showing in some cases abnormal conditions of the bladder.

We cheerfully recommend this valuable work to our readers, and hope they will derive the same pleasure and profit that we have from its perusal.

Practical Surgery, including Surgical Dressings, Bandages, Ligations, and Amputations. By J. Ewing Mears, M.D., etc. Philadelphia : Lindsay & Blakiston.

The author does not claim any great originality in his work—it is only a compilation from the various modern authors, arranged for the use of students. And to the student who is endeavouring to gain manual dexterity by operating on the cadaver, this work would be an exceedingly useful guide, containing as it does, in a short concise form, all the principal ligations and amputations. As a guide to a surgeon in ordinary practice, the work does not go far enough. The subject matter is well and methodically arranged, each part being headed by a definition, then a general description of the appliances and instruments, and the parts on which they are to be applied. The work is made up in a handy volume, with remarkably good paper and clear type, and numerous illustrations.

Miscellaneous.

Canadians in England.—W. E. Winskell, M.B., of Kelvin, Ontario, has been admitted member of the Royal College of Surgeons England.

Canada Medical Association.—The Publication Committee have decided not to publish the transactions this year. That not more than one hundred names of subscribers have been sent in is certainly not an evidence of a lively interest in the welfare of the Canada Medical Association.

A New Tinea.—Dr. Siegfried writes to the *Philadelphia Medical Times* from Amoy, China: —A new variety of tinea is also being distinguished by Dr. Manson. It differs from tinea circinata in every particular, clinically and pathologically. The case is from the Straits Settlement, and has been known as a ringworm, the local name given it where it occurs, Burmese ringworm, etc. It affects the skin, and produces a condition similar to watered silk, one ring within another, and no part healing as the growth progresses. The epidermis is raised up in flakes, rises, and is detached in larger patches than in tinea circinata. Microscopically, the difference consists in there being few spores, much large-sized and long-pointed mycelium. The whole body becomes gradually affected, no part healing as in circinata. Dr. Tilbury Fox of London is to be written to in regard to it, and will present the case and notes for Dr. Manson.

The Battle of the Ligatures.—Mr. C. G. Wheelhouse said, in the address in surgery, before the British Medical Association, on this subject,—During the last few years, I have been watching carefully and curiously the efforts that have been made to adapt the material of which ligatures are made, and to harmonize their necessary presence in wounds with the requirements of antiseptic surgery. First, I have noted that various materials, elastic threads, catgut, horsehair, jute fibre, and silk of different kinds, all carbolized, of course, have, one after another, been employed. Secondly, the methods of their application have

been almost as varied as the material of their structure; some surgeons have inclined simply to close the arteries without wounding their coats; and some, as of old, to cut into these. One will cut off one end only of the ligature, while another will take away both and leave the knot to be dealt with by absorption. The conclusion at which I have arrived is that, as regards the whole subject, we are, for the moment, off the track, and are erring from true principles. I hold that the laws laid down by Jones as long ago as 1805, and afterward affirmed and substantiated by the late Mr. Hodgson, based as they were upon the safe ground of exhaustive experimental research, are as true now as they were when first promulgated, viz., that the only safe way of securing an artery is fairly to divide the inner and middle coats of the vessels, and that the only ligature to be trusted to do this efficiently is a well made firmly twisted round cord of silk; that elastic threads, after dividing the coats, if they do so at all, lose their elasticity, yield when they should hold on firmly, and thus permit the efflux of blood; that catgut softens too readily, bursts or slips, and is thus unsafe; that silk ligatures, when cut off at both ends, fail to become absorbed, and become prolific sources of after mischief; and that horsehair fails not only to be absorbed, but acts as a source of direct irritation from first to last. With both these two last, when cut short, I have seen wounds heal perfectly, and all seem well; but later on small abscesses have formed in various parts of their track, and from each of these, when they have given way, I have had to remove the unabsorbed knots and minute circlets of ligature before they have finally become firm and sound.

Elastic Crayon of Nitrate of Silver.—Dr. Pajot takes a laminaria-tent, two millimetres ($\frac{1}{12}$ in.) in thickness, dips it in some thick mucilage, and rolls it in finely powdered lunar caustic. When it dries, he has a crayon, of the usual thickness of a stick of nitrate of silver, which can be introduced into the cavity of the uterus without fear of breakage. In the same manner applications can be made to other cavities, and if necessary, with stronger remedies.—*Ally. Med. Cent. Zeit.*

The Medical Board of the Manchester Infirmary have recently decided to admit the students to their weekly consultations, after the custom adopted at St. Bartholomew's. The first open consultation was held in the theatre last Thursday, when several of the senior students availed themselves of the opportunity thus afforded of hearing the cases discussed by the different members of the honorary staff. The case is first briefly commented upon by the surgeon or assistant-surgeon introducing it; then questions are put by any member of the staff, and afterwards, the patient having left the room, the opinions of the members present are taken, beginning with the junior, and passing to the senior surgeon.

Beware of Hurry.—The maxim of safety—to avoid physical hurry and mental hurry alike—is, prepare. deliberate; in a word, adopt an orderly method. The man with a weak heart who endangers his life by hurrying to catch a train, unless under altogether exceptional circumstances, is probably the victim of a defect in early training, which leaves him at the mercy of impulse without order; or he is striving to fill a place in life for which his chief qualification has been the faculty of accomplishing by effort more than can be achieved naturally by steady labour. Some persons are ever hurrying after their engagements; others are goaded onward by the pressure behind them: but however the "hurry" is produced, it is full of peril to happiness of mind and health of body, and in the end by exhaustion, if not prematurely by accident, it *kills.*—*London Lancet.*

Births, Marriages, and Deaths.

BIRTHS.

In Montreal, on the 17th December, the wife of Dr. J. B. McConnell of a son.

In Barrie, on the 18th December, the wife of Dr. Oliver of a son.

At Galt, on the 22nd November, the wife of Dr. Sylvester of a daughter.

At 144 Duke Street, Toronto, on the 30th November, the wife of I. H. Cameron, M.B., of a son.

At Hawksville, on the 12th December, the wife of Dr. T. W. Vardon of a daughter.

DEATHS.

In Montreal, on the 18th December, Dr. J. A. Desloges, of Pembroke, Ont., aged 31 years.

At Kincardine, on the 4th December, Mary Elizabeth Matthie, wife of De Witt H. Martyn, M.D., in the 30th year of her age.

UNIVERSITY OF TORONTO.

The time for acceptance of the

CERTIFICATES OF MATRICULATION,

before the College of Physicians and Surgeons of Ontario, has been extended to MARCH 1st, 1879, after which date such Certificates will not be accepted in lieu of Matriculation in this University. W. G. FALCONBRIDGE, M.A., Registrar.

THE

Canadian Journal of Medical Science.

A MONTHLY JOURNAL OF BRITISH AND FOREIGN MEDICAL SCIENCE, CRITICISM, AND NEWS.

U. OGDEN, M.D., *EDITOR.*

R. ZIMMERMAN, M.D., L.R.C.P., London, *171 Church Street Toronto, Corresponding Editor.*

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☞ **All Communications, Letters and Exchanges must be addressed to the Corresponding Editor.**

TORONTO, FEBRUARY, 1879.

ANNUS MEDICUS, 1878.

(*Concluded.*)

The year 1878 will be remarkable, in the surgical history of stone, not only for the publication of the record of Sir Henry Thompson's unparalleled statistics, but also for the good work done within its limits and the two new operations of Mr. Teevan and Dr. Bigelow, of Harvard. Sir Henry Thompson published, at a meeting of the Royal Medical and Chirurgical Society, the statistics of five hundred cases of stone in his own practice. Four hundred and twenty-two were treated by lithotrity and seventy-eight by lithotomy, with sixty-one deaths, or a mortality of 12·2 per cent. The published cases of Cheselden, Martineau, Brodie, and Fergusson give four hundred and twenty-two cases, with sixty-nine deaths, or 13·98 per cent. The general conclusion reached was that lithotrity was unsuitable for stones more than one inch in their long diameter. Mr. Teevan has this year combined the operation of lithotrity with median lithotomy at one sitting, with good result, in the case of a patient suffering simultaneously from calculus, albuminuria, chronic bronchitis, stricture of the urethra and vesical atony. Dr. Bigelow's operation is called litholapaxy. It consists in a prolonged and thorough crushing of the stone, (by a new lithotrite which he has invented) and the evacuation of the whole of the fragments at the time of operation by means of special-shaped large tubes, or catheters, and an aspirating bottle, a modification of Clover's and Nelaton's. The operation has so far been very successful, and not only revolutionizes our old ideas as to the tolerance or intolerance by the bladder of mechanical interference, but also threatens to supplant the older procedures altogether. Mr. Berkeley Hill records a case in which lithotomy had to be performed twice within two and a-half months, owing to the cystitis favouring the formation of another stone. After the second operation, washings of the bladder by Clover's bottle cured the cystitis. Dr. Andrews, of Chicago, has invented a searcher for minute particles of stone in the bladder. It consists of a metal tube like a catheter, or *Sonde Coudé* to which a rubber tube with ear-piece may be attached. This is much more practical and sensible than the application of the microphone, and is almost identical with Dr. Leftwich's auscultatory-sound. Mr. Maunder speaks very highly of Buckston Brown's dilatable tampon in arresting hæmorrhage after lithotomy. Dr. C. W. Dulles, in the April number of the *American Journal of Medical Science*, returns to his advocacy of the too-much neglected operation of suprapubic lithotomy. Mr. Jonathan Hutchinson's case this year, however, does not redound to its favour. The value of quinine injections (20 grains to 25 ounces water, with a little sulphuric acid or brown vinegar) in bladder affections attended with urine loaded with pus and extremely offensive, has again been pointed out by Mr. Nunn, and confirmed by numerous other observers. Mr. Reginald Harrison, of Liverpool, bears testimony to the efficacy of the local treatment by suppositories, for the introduction of which he has invented a pessary catheter. Reuben A. Vance, of Gallipolis, records a case of inversion of the bladder in a female child reduced without difficulty. Pancoast, of Philadelphia, has introduced a new

urethrotome, on the plan of Syme's modified. Dr. Saint-Philippe records two cases of urethritis due to the internal administration of arsenic. Mr. Gay exhibited to the Pathological Society a specimen of gangrene of the penis, which he had removed, resulting from thrombosis of the pudic and prostatic branches of the internal iliac veins. The patient suffered from tonsillitis, followed by rheumatism of knees and ankles; had never had syphilis. The case was regarded as rheumatic phlebitis: recovery ensued. Dr. Francis Labat treats congenital hydrocele by injections of alcohol. At a discussion upon this subject in Paris lately, the opinion appeared to be pretty general that such cases should be let alone, having a strong tendency to spontaneous cure. Mr. Messenger Bradley treats varicocele by a new method, adopting the retroclusive form of acu pressure of the Aberdeen school. He passes a strong hare-lip pin between the veins and the scrotal-wall, and then turns the point back without penetrating the scrotum on the opposite side, and passes this time behind the veins and out at the point of entrance. Nepveu asserts that the existence of scirrhus of the testicle is undeniable, and he has collected nine cases. Its characteristics are :—Small volume, woody hardness, slight sensibility, slow progress (two to six years). At a discussion at the Surgical Society of Paris on castration, ligature of the cord *en masse* was highly condemned. Tillaux, Sée, Verneuil, and Desprès advocated the ligation of both arteries and veins. As an evidence of what an amount of traumatism the human body will sometimes stand, the two following cases are of interest :—Schneider, of Könisberg, records a case of gunshot wound of the chest, in which he successfully removed the clavicle and five ribs; and Mr. Hulke records a case of fracture of both humeri, rupture of the left brachial artery, abolished conductivity of left radial and median nerves, broken ilia, and laceration of the quadriceps extensor cruris just above the patella, followed by recovery, with little trace of permanent injury, except some limitation of flexion of left elbow-joint. Dr. Horace Evans records a case of traumatic tetanus, with recovery. The medicinal treatment consisted in bromide of potash, chloral, and opium. Food was abundantly taken, but no stimulants. A case of traumatic tetanus in Manchester Infirmary, under Mr. Heath, amply demonstrated the power chloral hydrate exercises over tetanic spasms in sufficient doses (20 grains, with 20 of bromide, every two hours). Dr. Bigelow reports a case of tetanus from a rusty nail in the foot relieved in less than thirty minutes by introducing a drachm of chloral into the wound after enlargement by incision. Four fatal cases of tetanus are recorded, in each of which nerve stretching appeared to afford relief. H. Busch, of Bonn, in the treatment of severe burns, commends disinfection of the parts and the application of lint spread with Lister's boracic acid. The treatment by immersion in a strong solution of soda has received commendation in all quarters throughout the year. The galvanic treatment of bed-sores has, during the year, met with many successes. Dr. Dyce Duckworth advises that, besides the use of a water-bed, patients with bed-sores should lie constantly with the buttocks and sacrum in thick linseed-meal poultices. Mr. Golding Bird's treatment of scrofulous glandular enlargements by the painless electrolytic caustic, which he has devised, has been subjected to further trial this year, with most satisfactory results. A French writer urges that the interior of these glands should be cauterized with nitrate of silver as soon as they are incised. Kappeser records four cases of the beneficial use of regular periodic inunctions of soft-soap in chronic glandular affections. Pasquale Pirrochi reports very favourably of the local application of dilute tincture of tayuya in phagedenic and scrofulous ulcers and in blenorrhagia. The local application of peroxide of hydrogen is also highly commended. Mandelbaum treats chronic ulcers by Hebra's scraper and iodoform, followed by mercurial and soap plaster. He is pleased with his results. Mr. Jonathan Hutchinson, Mr. Callender, and Mr. Gamgee add their testimony to the value of Martin's rubber bandage in the treatment of ulcers of the legs. Dr. Martin indignantly repudiates Mr. Solomon's suggestion that his bandage is only a modification of the domett bandage in ordinary use in colliery practice; but Mr.

Sampson Gamgee points out that, although the idea is perfectly original with Dr. Martin, yet the method was long ago employed by Thomas Baynton, surgeon, of Bristol, and mentioned in his work in 1799. Duhring, of Philadelphia, records an example of that rare affection of the skin known as xeroderma. He also reports a case of onychomycosis trichophytina, and Dr. Graham, of this city, has also met with one this year. Mr. Alex. Hawkins records a case of sloughing from elbow to wrist. The wound was treated by skin-grafting—about 100 grafts being used, chiefly from the cadaver — and healed over in five weeks. Duhring and Van Harlingen have found the glycerole of the subacetate of lead chiefly useful in eczema rubrum of the legs, but it possesses no anti-pruritic properties. Bulkley and many others report very favourably of Martin's rubber bandage in eczema. Dr. Lindsay reports in the *Medical Times and Gazette* a case of eczema attended with a pigmented exudation, at times green, at others blue. Mr. Squire reports a couple of cases of port-wine mark cured by linear scarification. He showed at a meeting of the Medical Society of London a scalpel he had devised with sixteen parallel blades, the whole measuring less than half an inch across, for effecting this purpose. He also showed another instrument, consisting of thirty-six needles fixed into a plaster of paris handle, and not covering half an inch square. These should only be heated to a black-heat on their insertion into the skin. Dr. Jno. Brunton reports two cases of nævus cured by sodium ethylate, as suggested by B. W. Richardson. Dr. Sangster presented to the Clinical Society a rare case of urticaria pigmentosa. At the same meeting, Dr. Tilbury Fox read a paper on a hitherto undescribed affection of the hair follicle, which he has denominated cacotrophia folliculorum. Piedra is the new name given to an old affection of the hair, redescribed this year. Dyce Duckworth has introduced a new epilating forceps, figured in the *Lancet* of 6th April. Mr. Balmanno Squire reports the successful treatment of lupus of the face by linear scarification, as in port-wine marks. Prof. De Roubaix has invented a new suture needle, which is made by Denis, of Brussels. It consists of a sharp pointed hollow needle containing a crotchet-needle, which can be made to slide in or out, and to which, when protruded, a silk or silver suture can readily be hooked. Riedinger has found that the application of the induced current will prevent the hæmorrhage which is apt to follow the use of Esmarch's bandage in amputations. Mr. Lister, of London, this year read a paper before the Académie de Médecine, of Paris, on the effect of posture on the peripheral circulation, showing that elevation, acting reflexly, determined contraction of the arteries, and that, therefore, position alone sufficed to arrest hæmorrhage from the smaller vessels. Amongst the new works, or new editions of old works, on surgery we note the appearance during the year of the following:—Second edition of Gant's Science and Practice, Ashurst's Principles and Practice, second edition of Holmes's Principles and Practice, Vol. II. of Billroth's Lectures on Surgical Pathology and Therapeutics, Vol. I. of Hayes Agnew's Principles and Practice, Carnocham's Contributions to Operative Surgery and Surgical Pathology, Stinson's Manual of Operative Surgery, Sampson Gamgee's Clinical Lectures on the Treatment of Wounds, second edition of Hill and Cooper's Manual of Venereal Diseases, Fasc. I. Jonathan Hutchinson's Illustrations of Clinical Surgery, eleventh edition of Druitt's Vade Mecum, Part I. of Balmanno Squire's Atlas of Diseases of the Skin, a Handbook on the Diagnosis of Skin Diseases, by Liveing, and the fourth edition of his Notes on Treatment, Lane's Lectures on Syphilis, further parts of Duhring's Atlas of Skin Diseases, Balmanno Squire on the Treatment of Poriasis, Erasmus Wilson's Lectures on Dermatology, delivered at the Royal College of Surgeons in 1876, 1877, and 1878, Otis on Stricture of the Male Urethra and its Radical Cure, Macnamara on Diseases of Bone, Francis Mason's Lectures on Surgery of the Face, fourth edition of Curling on Diseases of the Testis, Spermatic Cord, and Scrotum, and fourth edition of Surgery of the Rectum, by Henry Smith.

OBSTETRICS, GYNŒCOLOGY, AND PEDIATRICS.

Coming now to the highest branch of the profession, the once disdainfully neglected, but

now the most highly cultivated sphere of practice, we find that the men who are both physicians and surgeons, and something in addition, have not by any means neglected their opportunities or failed to advance the subject of their special care and study. At the late meeting of the British Medical Association, Dr. Wiltshire did good service in directing attention to the great improvement in practical results flowing from the improved character of the teaching in this department; but, perhaps, still greater benefit was conferred by his clear and forcible exposition of the lines and method in which this increased utility might be, and should be, still further extended. Upon the subject of puerperal mortality and its relation to obstetric teaching, Dr. Lombe Atthill also, on the same occasion, gave utterance to facts and opinions of similar import; and these two speeches alone should suffice to mark an era in the history of the science. Henry L. Horton has this year warmly advocated the injection of atropine into the substance of the cervix uteri, for the purpose of diminishing the pains and shortening the duration of the first stage of labour. He cites eight cases in support of the practice. At the last meeting of the American Gynœcological Society, Dr. Emmet read a paper on the necessity of early delivery, as demonstrated by the analysis of one hundred and sixty-one cases of vesico vaginal fistula. Nearly all the speakers agreed that the forceps were less dangerous than delay. Hélot confirms Budin's statement as to the utility of waiting till pulsation in the funis stops before ligating it. Dr. Rigby, of Preston (Eng.), records a case of labour complicated with occluded double vagina, in which delivery was happily effected as far as the mother was concerned. The vaginal orifice was so small as to be found only with great difficulty, and the whole canal so contracted as scarcely to admit the finger. Barnes's water-bags accomplished dilatation of the vaginal canal in an admirable manner; a face presentation, mento-posterior, was found, and the long forceps applied, but craniotomy had ultimately to be resorted to. Dr. Albert S. Morton, of London, has the courage to put on record a case of breech presentation, in which he fractured the femur in endeavouring to draw down the leg. Schülein, Münster, Schede, Schücking, Kehrer, and Chamberlain record the use of antiseptic injections and lavations after every labour; and Zweifel, Langenbeck, and Richter record a similar practice in their hospitals, attended with excellent results. Küstner and Fritsch both report cases of sudden collapse, unconsciousness, and rapid pulse supervening on the injection of disinfectant solutions into the uterus immediately after delivery. Salicylic and carbolic acids were the disinfectants employed. Dr. Gœlet, of New York, reports a case of hour-glass contraction of the uterus before the expulsion of the fœtus. In an interesting discussion at the American Gynæcological Society upon the subject of post-partum hæmorrhage, Penrose advocated swabbing the interior of the uterus with linen rags dipped in vinegar; White, of Buffalo, agreed that the practice was a good one, but recommended dilute alcohol or hot water. Thomas maintained that the careful prevention of clots collecting in the uterus would suffice in the majority of cases. Albert Smith agreed, stating that the law of the contractile tissue of the uterus makes it contract if it is empty—a clot acts like a splint, and so does a piece of retained placenta. Atlee and Barker thought that when the hand is introduced it should be allowed to remain until expelled by the uterine contractions. Prevention being better than cure, the lesson of the whole is this: that the fundus uteri should be gently, but firmly, grasped the moment the fœtus leaves the uterus, and that this preventive stimulant should not be intermitted until firm uterine contraction has been established and maintained. The hæmostatic effect of intrauterine injections of hot water has been amply attested during the year by numerous observers, foremost among whom stands Lombe Athill, the Master of the Rotunda. Large doses of turpentine in post-partum hæmorrhage has formed the theme of many minor contributors to the English journals during the year. Saint-Philippe, and Chantreuil, and others report favourably of the use of ergotin hypodermically. Chantreuil records four cases of post-partum anæmia wherein transfusion appeared indicated, but which were successfully treated

by hypodermic injections of ether and alcohol. McClintock, of Dublin, records a successful case of transfusion after labour, after the hypodermic use of sulphuric ether had failed. Cæsarean section is an operation of such high fatality that it is pleasant to record an occasional favourable issue. In the case of death of a parturient woman, or one who has approached the term of gestation, it is the manifest duty of the practitioner, if he arrive within twenty minutes or half an hour of death, to endeavour to extract by the speediest method, and save the life of the child. Dr. D. Pedro Gallardo records the successful extraction of a living child by Cæsarean section five minutes after the death of the mother. Mr. E. M. Wrench, of Basley, reports a case of Cæsarean section in a dwarf with recovery of mother and child. He operated with the patient in a sitting posture. Prof. Späth records a successful Cæsarean section in which he removed the uterus. Müller, of Berne, records another in which he did likewise. He lays great stress on the good result of ligaturing the cervix, and thereby securing a bloodless operation. The operation of laparo-elytrotomy, suggested by Jörg in 1806 and performed by Ritgen in 1820, and which was reintroduced and, in fact, redevised by Thomas in 1870, has been attracting a great deal of attention at home and abroad throughout the year. Seven or eight cases (chiefly Thomas's and Skene's) are now on record, and the results have been so far superior to those of Cæsarean section that it bids fair to entirely supplant the older time-honoured (and now time-dishonoured) operation. It appears to avoid the risk of peritonitis, of intestinal incarceration and of septicæmia. There is less shock and no metritis, and the only special caution required is to avoid wounding the ureter or bladder. The abdominal wall on the right side is incised from the spine of the pubis to the anterior superior spine of the ilium ; the peritoneum is then shoved up, and the vagina opened near its junction with the uterus (preferably by tearing after making a small incision) ; the mouth of the uterus is then hooked up and the child extracted through the abdominal wound. Ligation, the actual cantery and compresses should arrest hæmorrhage if such occur. Mr. Hime, of Sheffield, is the first to perform laparo-elytrotomy in Europe since its reintroduction. He operated on the 14th July ; the child was saved, but the mother died. On the 22nd Nov. Dr. Edis also performed the operation at the British Lying-in-Hospital. The child was saved, but the mother was in such a condition that she must have died under any circumstances. He is favorably impressed with the operation. Inventive genius is not yet satisfied with the ordinary midwifery forceps, notwithstanding the very general satisfaction they afford to those who have most occasion to use them, and consequently, new inventions are constantly appearing. Tarnier's forceps, introduced last year, have been favourably received by some, while others have sought to apply tractor hooks to the ordinary instruments in, order to make them fulfil one of the indications served by Tarnier's, and still others have given the common tongs a curve in the handle with the same object in view. At a meeting of the Glasgow M. C. Society, Dr. J. T. Whittaker showed a pair of forceps, both blades of which could be applied at once—this being effected by means of a ball and socket joint in the middle of the instrument which enables one blade to move round the other. The introduction of the hand (carbolized or otherwise) some time after labour, for the removal of a portion or the whole of the placenta, has not been an uncommon practice either before or since Matthews Duncan's writings on the subject, but one of the most remarkable instances yet recorded is probably that of Dr. Leslie Jones, of Blackpool, this year, who introduced his hand and removed the placenta six weeks after delivery. A remarkable evidence of the retentive power of the uterus and capability of resisting the effect of traumatisms is this year recorded at the Lille Hospital. A young girl twenty-two years of age, pregnant and having reached the end of gestation, sustained a penetrating wound of the abdomen, followed by issue of some of the viscera. Three days afterwards labour set in, and in four hours a living and well-formed child was born. The woman made a good recovery, and the sutures which united the edges of the wound (eight centimetres long) were

not disturbed by the act of parturition. The vomiting of pregnancy is always a subject which attracts considerable attention; it is, moreover, one upon which the whole force of the pharmacopœia has been, time and again, vainly exhausted. It is, therefore, comforting to know that there are resources outside of the pharmacopœia to which we can appeal. Dr. Copeman, of Norwich, contributes five cases of its successful treatment by dilatation of the os uteri with the finger. Dr. M. O. Jones, of Chicago, and Dr. Marion Sims testify to the value of the application of the solid stick of nitrate of silver to the os and cervix uteri. Dr. Lloyd Roberts, of Manchester, has also found this beneficial. Lubelsky advocates the application of the ether spray to the epigastrium and back, continued for three or five minutes every three hours. Chaballier, of Lyons, reports good results from morphia hypodermically. S. C. Busey, of Washington, finds Girabetti's suggestion valuable, viz.:— 3ss to 3j doses of bromide of potash, in beef tea, every four hours. Even when the worst comes to the worst we are not without resource. Dr. Henry Campbell, of Augusta, Ga., narrates a case in which for twenty-five days rectal alimentation alone was the sole method of feeding employed. He also gives an account of some experiments on a kid to which nutritious enemata stained with some colouring matter had been given, and when the animal was killed on the 18th day, the colouring matter was found throughout the small intestine as far as the fourth stomach. Dr. Fordyce Barker (in the *American Journal Obstet.*) this year earnestly advocates the non-induction of premature labour in the albuminuria of pregnancy until after a thorough and persevering trial of appropriate treatment. What that treatment is, is so ably set forth in his work on puerperal disease as to need no mention here. Weber records a case of puerperal convulsions controlled by large doses of chloral. But the case is specially noteworthy for the simultaneous existence of albuminuria amaurosis, eclampsia, and inflammation of the kidney, together with polyarthritis, terminating in recovery. Dr. Angus Macdonald brought before the Edinburgh M. and C. Society the report of, and microscopical specimens from, two cases of puerperal eclampsia. It appeared that the Traube-Rosenstein theory of cerebral anæmia is inadequate to the explanation of these cases, and he advanced the theory that irritation of the vaso-motor centre was the cause of the brain-anæmia and the consequent convulsions. The cases are further remarkable for the existence of colloid change in the kidneys without obstruction. The discussion upon this paper showed that in Edinburgh, at all events, the chief reliance in the treatment of this affection is upon chloral and venesection. Morphia has had a good many advocates since Loomis's paper, and a number of cases favourable to its use have been reported. Fehling suggests an infusion of jaborandi as relieving the conditions pre-supposed by the Traube-Rosenstein theory. Several cases of extra-uterine fœtation have been recorded in which recovery occurred; in one, the fragments of the fœtus passed *per rectum*, in another, through Douglas's *cul-de-sac* and the vagina, and others were relieved by surgical intervention. W. F. Atlee records a case which he treated successfully by laparotomy. With reference to the source of the liquor amnii, Dr. Prochownick affirms that it is derived from the fœtus itself, and contains urea (from skin and kidneys) after the sixth week. Dr. John Williams this year points out that the condition of the uterine vessels is the most reliable *post mortem* sign of parity or nulliparity, and exists for a year after delivery. It is pretty generally recognised that plethora may be a cause of sterility, and Prof. Chauffard narrates a case of this kind cured by venesection on the day preceding the menstrual flow. Dr. Lombe Atthill records a case of uterine hydatids successfully treated by the injection of hot water (not under 110°): and he regards the same treatment as a perfectly safe and most valuable means of arresting hæmorrhage in this and other forms of abortion. Ssotschawa records a case of double uterus and vagina, with pregnancy in both divisions of the uterus. Everett, of Stirling, Ill., reports nine cases of uterine fibroids treated by the Faradic current. He regards it as safer and superior to ergot. Dr John Williams, of University College, reports two cases of fibroid tumour of the uterus suc-

cessfully treated by hypodermic injections of ½ grain of sclerotic acid into the abdomen twice a week. Mr. Spencer Wells this year successfully removed a solid uterine fibroma, weighing 70lbs. Dr. Brumwell, of Mossley, records a recent case of complete inversion of the uterus easily reduced by pressure. Dr. Ford, of Harrogate, records another reduced on the fifteenth day by means of a cup-shaped stem and rubber pad worn for eight days with steady pressure. Mr. W. H. Wright records another reduced after a few hours and followed by puerperal hysteritis. Abbie C. Tyler, of Waukegan, Ill., records a case of reduction by Braun's Colpeurynter of a case of inversion of the uterus of eleven years' duration. Mr. Spencer Wells has this year successfully employed Mr. Golding Bird's painless electrolytic caustic in the treatment of uterine cancer. Dr. Galabin exhibited at the Obstetrical Society of Great Britain a new metrotome on the principle of Civiale's urethrotome. It is a modified form of Peaslee's, and cuts both sides equally and to a very moderate extent. Dr. Greenhalgh has introduced a new form of elastic uterine stem pessary for the cure of dysmenorrhœa, sterility, and the various flexions of the uterus. Numerous cases of its successful employment are recorded. Dr. Gaidner, of Adelaide, this year records an extremely rare case of hydatids of the female breast. The name of the applications for cracked nipples is legion. Those chiefly recommended during the year are: a five per cent. solution of carbolic acid by Haussman and by Steiner, who cite numerous cases; powdered acacia, by an Italian physician (it should be dusted on after each application of the child to the breast); suberine (impalpable powder of cork) covered by goldbeater's skin comes recommended by Brochard. It is to be removed at each suckling, but the goldbeater's skin should still protect the nipple during that process. Smolski has discovered that iodide of potash is rapidly absorbed from the vagina. Professor Simpson exhibited at the Ediuburgh Obstetrical Society two small round-celled sarcomata from the vagina. They are probably unique, as the uterus was healthy. Secondary vaginal sarcomata are not unknown, but primary have not been hitherto observed. George J. Engelmann, of St. Louis, this year records two fatal cases of Battey's operation (so-called normal ovariotomy) in his hands. This is followed by a summary of forty-one cases of extirpation of the ovaries. Professor Simpson, on the 10th of June last, successfully removed both ovaries for dysmenorrhœa from a lady aged thirty-five. No reaction followed the operation, and the case progressed favourably. The year 1878 will stand pre-eminent in the annals of ovariotomy. Never in its history, or indeed in that of any great surgical operation, have such successes been recorded. Pronounced not many years ago by one of the boldest of French surgeons to be nothing short of murder, it stands to-day the safest of the capital operations. When the wonders of our day shall have become trite matters of every-day occurrence with a succeeding and perhaps not far distant generation, the great achievements of Thomas Keith and Spencer Wells may cease to excite that astonishment and admiration which they command to-day, but the faithful historian of the future will not fail to note for all time to come that to these two men is due the credit and the honour of that unprecedented record. Higher, honour, it is not within the power of kings or emperors to confer, and Nature's noblemen can well afford to carry to the grave, in their plain, unostentatious, and untitled dignity, such names as Thomas Keith and Thomas Spencer Wells. The question of the employment of antiseptics in ovariotomy is not yet decided; however the weight of authority, especially amongst German surgeons seems to be in favour of their use, Mr. Wells lectured this year before the College of Surgeons, on abdominal tumours. He has completed nine hundred operations of ovariotomy and has performed twenty-seven successive operations without a death. He does not adopt Listerism, and expresses himself as thinking that "if by scrupulous cleanliness germs can be deprived of a soil on which they thrive, Listerism is superfluous." This view is borne out by his experience and by Mr. Callender's statistics of amputations. "Safety from wound-poisoning," says an English writer, "lies in either plan, the greatest security obviously in a combination of both." The burning question of the treatment of the pedicle is still un-

settled : Mr. Spencer Wells prefers the ligature, and so does Knowsley Thornton : Keith prefers the clamp and cautery, but if antiseptics are adopted, the ligature will, doubtless, carry the day. Carl Schroeder, of Berlin, this year makes known the result of his ovariotomies for the last two years. The record is forty-seven cases and seven death, *i.e.* 14·9 per cent. He is a strong advocate of Listerism. Mr. Knowsley Thornton reports thirty-seven antiseptic ovariotomies with two deaths (5·4 per cent.) Two cases of ovariotomy are reported from Germany in which recovery ensued in spite of wounding the bladder and division of a ureter. Dr. John Williams records a case of antiseptic ovariotomy with good result, although the patient was in a state of pyrexia (temperature 102°, pulse 120). Dr. Heywood Smith records another successful ovariotomy during pregnancy without abortion. Barlow and Howard Marsh a successful ovariotomy in a girl aged twelve. Jenks, of Detroit, a case which threatened during the after treatment to prove fatal from tympanites. Speedy relief was obtained by inverting the patient—literally standing her on her head—when the gas escaped, *per anum* with great force. The most marvellous record is yet to be read. Keith has published another series of fifty cases and is a strong adherent to antiseptics. He did not, however, always use them, and so his cases cover both grounds. He expresses the belief that cancerous cases will no more be operated on for they can be recognised beforehand by the microscope, as Foulis, of Glasgow, has done so much to demonstrate. Without antiseptics, the proportion of fatal cases in his hands was one in seven for fourteen years ; for a period of five years preceding the use of the spray, it was one in ten and a-half ; and for the last five years, one in twenty-one. He attributes his success to (1) drainage in severe cases by large glass tubes perforated going to the bottom of the pelvis, (2) the use of the cautery as proposed by Baker Brown, (3) the employment of Koeberle's compression forceps, and (4) the substitution of ether for chloroform, avoiding after vomiting. With antiseptics, he thinks the intraperitoneal treatment of the pedicle answers best. He uses catgut ligatures or soft iron wire. He has now done forty-nine operations with the spray ; two of the first eight died ; the last forty-one all recovered. His record now stands twelve deaths in the last one hundred and fifty-six operations, three in thelast seventy-five, and the last forty-one operations without a single death ! In the department of pediatrics there are some curiosities to record. Mary Putnam Jacobi reports a case of acute fatty degeneration of the new-born Tapret records a case of acute pulmonary tuberculosis in a new-born child. This is one of the rarest of occurrences. Mr. Ingleby Mackenzie, of Rugby, met with a case of congenitally impervious prepuce. Carl Ruge reports a pneuothorax in a new-born child. Dr. Cuyley, of the N. E. Hospital for children, met with a case of pleurisy with effusion in a child four months old, treated by parecentesis and followed by recovery. This is the youngest case on record. Cheadle records five cases of ague in young children occurring in London. Handfield Jones and Cheadle record the occurrence of a scaraltinoid eruption in some cases of ague in young children. Lefebvre reports a case of extraordinary precocity, in a girl eight years old, at Oberpallen, in Luxembourg. She was born fully developed, menstruated at four years, and became pregnant at eight. Horatio Yates, of Kingston, Ont., another case of a girl aged two years and three months, presenting all the external signs of womanhood and having menstruated for three months—weighed forty-eight pounds. Leared, at the Pathological Society, showed ovarian cysts from twin infants. Each ovary contained a cyst the size of a filbert ; one case also presented complete obliteration of the common bile.duct. Mr. Francis Caddell reports a case of umbilical urinary fistula in a girl aged eight. Mr. Wells Hubbard, of Lenham, records a case of varicella occurring in an infant twenty-four hours after birth. Cruse, in a paper on the condition of the urine in sucklings, has shown that the absolute quantity of urine increases rapidly from the second to the tenth day, and from the tenth to sixtieth slowly. That albumen is frequently present up to the tenth day, not afterwards. That compared with the adult secretion, the quantity in proportion to body-weight is three and a-half to four times greater.

Géllé reports favourably of the hypodermic injection of ether in the convulsions of teething. Veiger records the expulsion of a foreign body from the œsophagus of a child by means of two hypodermic injections ($\frac{1}{2}\frac{1}{7}$ grain in all) of apomorphia. Bouchut directs attention to the value of chloral for producing anæsthesia in children for minor operations. He administers one, two, three, or four grammes at a single dose, according to the age, and reports nine thousand cases.

The bibliography of the year includes second edition of Playfair's Midwifery, second edition of Leishman's Midwifery, second edition of Milne's Principles and Practice, part two of Otto Spiegelberg's Text-book of Midwifery, second edition of Barnes' Medical and Surgical Diseases of Women, fourth edition of Thomas' Diseases of Woman, Emmet's Principles and Practice of Gynæology, Chadwick's Manual of Diseases of Women, Goodell's Lessons in Clinical Gynæcology, The Mechanical System of Uterine Pathology, by Graily Hewitt, third edition of Savage's Surgery, Surgical Pathology, and Surgical Anatomy of Female Pelvic Organs, Angus Macdonald on the Bearing of Chronic Diseases of the Heart upon Pregnancy, Parturition and Childbed, Aveling on the Influence of Posture on Women in Gynæcic and Obstetric Practice, fourth edition of Tilt's Uterine Therapeutics, Bantock on Ruptured Perinæum Guerin's Clinical Lecture on Diseasee of Internal Genitals of Women, Skene on Diseases of Bladder and Urethra in Women, Creighton on Physiology and Pathology of the Breast, third edition of Smith on the Wasting Diseases of Children.

MEDICAL JURISPRUDENCE, TOXICOLOGY, AND HYGIENE.

Two cases illustrative of the possibility of the occurrence of impregnation without penetration of the intromittent organ are this year recorded; one a case of vaginismus by Dr. Charles Roth and Dr. Rigby's case of occluded double vagina referred to in the section of obstetrics. Dr. John Williams has this year pointed out that the most reliable *post mortem* sign of parity is the condition of the uterine vessels, and this is good for a year after delivery. Dr. Pinard communicated to the *Société de Médecine Legale* fourteen cases of subpleural ecchymoses of the new-born. These have formerly been regarded as evidence of infanticide by suffocation, but he shows that they may result simply from difficult labour, thus controverting Tardieu's opinion and confirming that of Liman of Berlin. A fatal case of pistol-shot without perforation of the skin is recorded by Dr. Hofmann. The pericardium contained one and a-half pounds of blood and the muscular tissue of the heart was torn in two places. Zipple relates a case in which a man during delirium, preceding the eruption of smallpox killed his child and was held irresponsible. At the *Académie de Médecine*, on the 19th of February, M. Roche described a method of distinguishing between real and apparent death. It consists in introducing a cotton thread into a vein, allowing it to remain six minutes and then withdrawing it. If it be covered with fibrin life exists; if not, death is certain. A good many cases of arsenical poisoning in children from the external use of violet powder sophisticated with the powder of white arsenic are recorded in London, England. Rouyer has found that a mixture of a solution of the sesquichloride of iron and the oxide of magnesium is the best antidote to arsenious acid and its salts. A death from phosphorus poisoning is recorded at the Netley Hospital, which was treated and regarded even *post mortem* as a case of acute atrophy of the liver. The fact of the poisoning was only discovered subsequently and verified by chemical analysis, and the case corroborates Wagner's opinion that "many of the recorded instances of acute atrophy were probably cases of acute phosphorus poisoning." The question of the toxic properties of copper has elicited a good deal of discussion during the year, and no agreement has been attained. A case of death, attributed to manipulation in the powder of copper was communicated to the Clinical Society of Paris by Dr. Feltz, of St. Denis. The woman, twenty-seven years of age, was engaged in the colouring of feathers and lived constantly in an atmosphere of copper dust. Death appears to have been due rather to the local irritant effects of the particles of copper on the skin and various mucous membranes rather than

to toxic properties in the metal itself. These are generally regarded as very slight. Leopold records a case of fatal poisoning by inhaling dust containing chrome yellow. Several cases of lead poisoning by flour, due to the stopping of holes in mill-stones with lead, are reported in England, France, and Norway. Dr. Geo. Hay, of Philadelphia, advocates the treatment of chronic lead poisoning by chloride of sodium, and not by sulphate or iodide of potash. Mueller Warnek, of Kiel, reports a recovery from poisoning by cyanide of potassium. The patient's stomach was full, and he soon vomited. He was placed in a warm bath and ice-water was poured upon his head from a height of several feet, with remarkable effect. Far too many cases of carbolic acid poisoning are on record. Now that it has come into such general use, its toxic properties should be widely made known and care in its use enjoined. A nurse in one of the Dublin hospitals died the other day through drinking it by mistake. Lime and mucilage make a convenient antidote, but Senftleben recommends sulphuric acid, forming innocuous sulphocarbolates. Viger records two cases of poisoning by methyl spirit, and regards it as a narcotic. Paul Guttmann and Ernst Schwerin have independently reached the conclusion that death from the administration of peroxide of hydrogen is due to the liberation of gaseous oxygen in the blood, contrary to the opinion of Assmuth and Schmidt. Dr. Baillée says that ice in the rectum is useful in chloroform narcosis. Prof. J. A. Larabee successfully treated a case of chloroform poisoning by the hypodermic injection of $\frac{1}{10}$th grain of digitaline, repeated in an hour and a-half, and followed by $\frac{1}{10}$th grain of atropia. Dr. Francis Ogston records a case of poisoning by chloral-hydrate, and suggests stale sulphide of ammonium as a test. It is only necessary in using this to distinguish between the reaction given by antimony and chloral, the orange colour given by the latter deepening, on standing, to a dull brown. At the Medical Society of London, Dr. Milner Fothergill narrated a case of opium poisoning successfully treated by the hypodermic injection of one grain of atropia in a single dose. Dr. Seldon, of Norfolk, Va., reports several cases successfully treated by immersion of the feet and legs in scalding water. The late Chantrelle trial in Edinburgh, in which the prisoner, having a knowledge of drugs, endeavoured to poison his wife with opium in such a manner as to escape detection, is a fit parallel to the distinguished Palmer case of 1856. No poison, or trace of poisoning, was found in the body *post mortem*. Stains on the sheet containing morphia and meconic acid were testified to by Drs. Maclagan and Littlejohn and Profs. Fraser and Crum Brown, and the criminal suffered the extreme penalty of the law. Laborde has laboured to show that death in aconite poisoning is due to failure of the lungs, and not of the heart, and that artificial respiration is the best antidote. Dr. S. A. Brown has found bromine to be a remedy for the eruption of poison oak, ivy, and sumach. Glisan, of Portland (Oregon), reports a case of successful treatment of strychnia poisoning by apomorphia. Barff's iron (magnetic oxide) promises to be invaluable in sanitary matters, serving an excellent purpose for water-closet pans, soil-pipes, traps, urinals, water-pipes, water-cisterns, and cooking utensils. Dr. Downes and Mr. T. Blunt, in a communication to the Royal Society, amply demonstrated the antiseptic properties of solar light, and detailed numerous experiments in which sunlight had sterilized organic fluids. A Russian Society of Public Health was inaugurated on the 10th of February, under the presidency of Dr. Zdekarin. An Italian Society of Hygiene has been formed under the patronage of King Humbert, Prof. Alfonso Corradi, president. The literature here is rather meagre:—C. B. Fox's Sanitary Examinations of Air, Water, and Food, Ogston's Lectures on Medical Jurisprudence, and Blyth's Dictionary of Hygiene and Public Health have appeared. In alluding to general topics we shall be as brief as possible. Of primary interest to those resident in the city, we note the inauguration and very successful conduction of the Toronto Medical Society, under the able and genial presidency of Dr. Joseph Workman. The International Medical Congress met in Paris, as did also the International Society of Hygiene; the Annual Congress of German Surgeons met in Berlin on the 10th of April (Langenbeck presiding); the American Association, at Buf-

falo, on 11th June (T. G. Richardson); the American Gynœcol. Society, at Philadelphia, on 25th July (Wm. Goodell); the British Medical Association met in Bath, on 6th August (Dr. Falconer); the Italian Medical Congress, at Pisa, on 22nd September; the Canada Medical Association, in Hamilton, on 10th September (Jos. Workman). These meetings, although well attended, did not attract as many as had been expected, and while, as social reunions, they may perhaps serve the purpose for which they are designed, yet there is a rapidly-growing impression that, as scientific congresses, they are a delusion and a sham. It was suggested that Dr. Andrew Clarke's visit to Canada might perhaps be taken advantage of to form a Canadian branch of the British Medical Association, but his early return to the Old Country precluded any step being taken in that direction. The frightful epidemic of yellow-fever which prevailed in the Southern States from July to December, is now, happily, a thing of the past; but the lesson which it teaches ought to be good for all time. Through the beneficence of an American lady, a commission was enabled to investigate this epidemic and trace it to importation from the West Indies in May or June. Unfortunately, the commission is unable to recommend any new therapeutic measures. Yellow-fever has also prevailed during the year in the West Indies, Rio Janeiro, Madrid, and Senegal. Intermittent fever has also been unusually prevalent throughout the world. Cholera prevailed in Mecca and Jeddah early in the year, afterwards in Morocco, and some cases occurred in Malta, being brought thither by the Indian troops destined for Cyprus. The form of fever affecting the newly-arrived troops at Cyprus, not typhoid, and scarcely intermittent, has, for want of a more precise term, gone by the name of Cyprus fever, and is being competently studied. Plague was said to have broken out amongst the contending armies in the East during the early year, but it turned out to be typhus, apparently the inevitable accompaniment of the "arbitrament of the sword." Transfusion of blood is so difficult of proper performance that the substitution of milk is becoming pretty general, and the great record of the year is favourable to the change. Heurot, Onimus, Verneuil, and Cortez regard any benefit accruing as being due to the stimulant effect of the process, and warmly urge the injection of a few drops of ether or other stimulant (capillary transfusion) instead. Deaths from chloroform continue to be recorded, and about a dozen are reported in the journals, the catastrophe appearing to be associated, in nearly every case, with fatty degeneration of the heart. Ether, too, has some fatalities to answer for. Spencer Wells continues to depend upon the bichloride of methylene, and it is astonishing that his example has not been more widely followed. Wachsmuth, of Berlin, believes that the danger from chloroform is diminished by the addition of $\frac{1}{5}$th of turpentine, and this combination has been very satisfactorily employed. Prof. Occhini, of Naples, has caused ammonia to be inhaled before the chloroform, with, as he believes, beneficial effect. A committee has been appointed by the Royal Medical and Chirurgical Society to determine the comparative merits of the Sylvester, Marshall Hall, and Howard methods of artificial respiration. The application of the microphone to sounding for stone has been tried by Sir Henry Thompson, and to auscultation by B. W. Richardson and Prof. Hughes. It appears incapable of transmitting the character of the cardiac sounds. Its use in cases of surdity may be more gratifying. The mismanagement and neglect of sanitary matters and public health by succeeding governments has led to the agitation this year for a Minister of Public Health. It is not utopian to hope that such a desirable recognition of the importance of this subject may be inaugurated before many years elapse. We have to welcome the appearance of *Brain—a Journal of Neurology*, and also the *Journal of Physiology*, under the able editorship of Michael Foster.

All are willing to admit that the medical profession annually contrives to bear its full proportion of "that weight of care which crushes into dumb despair one-half the human race"; but if an unthinking world would but take deeper cognizance of facts, it could not long be unaware that in the year of grace, 1878, the profession has contributed an inor-

dinate proportion to the discharge of that great debt which humanity owes to nature. It is our melancholy duty to recall, in closing, the names of the year's illustrious dead:—Wm. Stokes, 74; Fleetwood Churchill, 70; Elliott, of Calcutta; James Blundell, 87; Wm. Geo. Porter, 87; Thomas Pritchard and Robert Gardiner Hill, 67 (the fathers of non-restraint in the insane); Henry Jephson, 80; Walter Barton Stott, 79; J. F. Marson, resident at Smallpox Hospital for 40 years; John Hilton, 74; Robert Willis, 80; Eason Wilkinson, 64; Charles Ritchie, who had been practice for 63 years; Sir James Cox, 67; E. R. Peaslee, 65; L. P. Yandell, 73; W. F. Atlee, 70; Francis Gurney Smith, 60; J. Robert Vanmayer, John Morgan, 80; Claude Bernard, 65; Regnault, 68; Becquerel, 90; Voillemier, 69; Hirtz, 69; Raspail; Pascal; Anglada, of Montpallier, 69; Bazin, 71; Rameau, of Nancy; Amussat, 68; Achille Foville, 79; Hermann Lebert, 65; Karl Kohler, 89; Ehrmann, of Strasburg, 86; Rokitansky, 74; Bartels, of Kiel; Ernst Reissner, Kovacs Sebesteny Endre, Giuseppi Repozzi, Serafino Vierucci, 62; Ranieri Bellini, 68; and Luigi Ciniselli. More immediately connected with ourselves, E. M. Hodder, 68; Hector Peltier, 56; Robert Lee Macdonald, Bullen, of Hamilton, and Dr. Benjamin Workman, 84; Lister (Belleville), Wright (Oakville), Waddell of Nova Scotia, and Langstaff. Some young men, too, of brilliant promise, have had their career of usefulness and fame "nipt i' the bud," and having, through lack of years, missed the "full flower of their accomplishment," their names are not so familiar to our ears as they would have been. To this list, alas! already far too long, must be added that hecatomb of martyrs (a full hundred) who laid down their lives in the endeavour to stay that fatal Southern plague whose presence, had the oft-repeated admonitions of the profession been regarded, would never again have sullied our much-boasted civilization. Want of space forbids our making individual mention of them here, but their names are entered on that ancient roll of honour whose daily call elicits the response, "Dead on the field of battle." It is gratifying to observe the advanced years of many whose names are set down above, and whilst admitting on the one hand that, in the words of the ancient maxim, "*Precandum est sit mens sana in corpore sano*," we also, on the other, cannot fail to have a deep appreciation of that bountiful dispensation of Providence which decreed that these sound minds should be incorporated in frames whose robust physical constitution enabled them, in the case of the majority, to extend the period of their great utility almost to the limit of man's mortal span. The beneficent nature of the physician's labour is its own reward, and his longevity is a direct refutation of the heathen proverb, ον δι θεοι φιλουσιν αποθνησκι νεος. Full of honour, as of years, they have gone over to the majority (*abiverunt ad plures*), and we esteem them happy, saying with Solon, ο γαρ θανατος ακριβης ελεγχος του βιου, και το ακρι προς το τερμα ευδαιμονως διαβιωναι. Idle repining at their loss were useless; "be ours the pain, be theirs the gain;" for them "the long day's task is done, and they must sleep." To quote the words of Dr. West, "almost without exception they may be said, in words used long ago, to have served their own generation, not themselves." Thus rising to the dignity of their high calling, they have trod in the footsteps of the Master—their great prototype and exemplar—and, departing, have left behind them a record and example which, in the years to come, may it be ours to follow!

THE DIFFERENTIATION OF COMA FROM ALCOHOL.—Dr. Macewen, of Glasgow, alleges that he has observed the temperature in a series of cases of fracture of the skull, opium poisoning, and apoplexy, and that in all these cases the temperature was found very much below the normal. Consequently this point is not to be relied upon for the purposes of diagnosis. He has found contraction of the pupil to be the rule in alcoholic coma. But he had accidentally discovered that if a patient was shaken or disturbed, the pupil dilated, but very soon contracted again. He therefore lays it down as a rule that an insensible person, who being left undisturbed for from ten to thirty minutes, has contracted pupils, which dilate on his being shaken, without any return of consciousness, and then contract again, can be labouring under no other state than alcoholic coma.

Selections: Medicine.

PURPURA HÆMORRHAGICA—HÆMORRHAGES OF THE RETINA—ABUNDANT EPISTAXIS—SERIOUS ANÆMIA AND HYPOGLOBULY—TRANSFUSION—RECOVERY.

BY M. BOUCHUT.

A young girl, thirteen years old, yesterday came into my wards attacked with a disease which was formerly called the spotted disease of Werthof, and which is nowadays designated by the name of purpura hæmorrhagica. I have traced its history in my "History of Medicine and Medical Doctrines."

This disease presents itself in children under three forms:—purpura simplex, purpura febrilis, and purpura cachectica. This last shows itself at the end of chronic diseases of childhood, and when you see it appear, you may be certain that death is near.

"In chronic diseases the appearance of purpura is a certain presage of death," I said in the aphorisms of my "Treatise on the Diseases of Childhood." This is true: and I have for thirty years never seen this sign appear without the fatal march of the disease proving the accuracy of the presage. At the close of pulmonary phthisis, of chronic enteritis, of the scrofulous cachexy, and of all the consumptions, this phenomenon appears and shows the close of life is near.

In addition to this variety of purpura, there is simple purpura and febrile hæmorrhagic purpura.

In our patient we have not to do with a simple purpura of the skin like those we very frequently observe here.

The form which you have before your eyes is rarer. It is the febrile hæmorrhagic type, there are frequent epistaxes, requiring plugging of the nostrils, and, although there may be no hæmaturia nor malæna, this case of purpura is serious on account of the anæmic and excessive hypoglobulic condition into which it has already thrown the patient.

A curious fact is that the child has no scorbutus, that is to say, swelling, softening, nor bleeding at the gums. We have here all that which generally characterises scorbutus, less the essential lesions of the mouth. Again, there are these multiple hæmorrhages on different points of the body, without hæmorrhagic stomatitis, which characterise purpura.

In the young girl of whom I am speaking, what is the cause of the purpura? Usually this disease results from obstruction, defect of aeration, despondency, poverty, bad nourishment, deprivation of fresh vegetables. In our patient there is nothing of the kind.

She lives at Passy, one of the finest quarters of Paris, one of the best aerated, the one in which diseases and mortality are the least frequent and the least considerable. She has been for four years in the same boarding-house, where she was in good health. She is well nourished, eats fresh meat, drinks wine, and so appears to be in suitable hygienic conditions.

In spite of this she has purpura, that is to say, a blood disease characterised by fluidity of fibrin alteration of the red globules, relative increase of the white globules, and friability of the blood capillaries. By her nasal hæmorrhages, she is much enfeebled, and each day becomes more pallid.

She can no longer get up nor sit up in her bed. She hardly eats, the pulse varies from 120 to 140, and the temperature from 38° (100°4 F.) in the morning rises to 39° (101°2 F.) in the evening.

She has slight hæmorrhages of the skin, hæmorrhages of the subcutaneous cellular tissue, and with the ophthalmoscope we find a large number of retinal hæmorrhages of variable volume, announcing a profound hæmorrhagic diathesis.

What must be done against this condition, which becomes serious and upon which I make an unfavourable prognosis? We must seek to fill the indications.

First indication: To augment the plasticity of the blood.—We accomplish this by means of the vegetable or mineral acids internally, by astringents and hæmostatics.

I have here given sulphuric lemonade, one gramme (16 m.) of acid to the litre (quart): nitric lemonade, with the same dose of acid: the *juice of three or four lemons* in the twenty-four hours.

We may give Rabel water two or three grammes (30 to 45 minims) a day in draughts: extract of rhatany in draughts two or three grammes (30 to 45 minims) in twenty-four hours, finally, the perchloride of iron in sugared water, one or two grammes (15 to 30 minims) daily, or fresh defibrinated sheep's blood in doses from one hundred to two hundred and fifty grammes (25 to 62 drachms) a day.

The hæmostatic waters of Tisseraut, Lécuelle, Pagliari, Brocchieri, and others are not so good as the perchloride of iron diluted in water, nor the defibrinated sheep's blood.

These means employed in our patient have not succeeded. The hæmorrhagic diathesis increases and the anæmic weakness which it engenders is enormous. This leads us to the new indications I am about to show you.

Second indication: To remedy the blood destruction and to replace the blood lost.— When the loss of blood is so great as to endanger life there is only one more resource, transfusion.

Transfusion.—Who could believe that this conquest of anatomism, combatted by the official mandarins of medicine of the seventeenth century, and erased from the science by decree of the Faculty of Medicine, could have regained its place in medical practice? Yet it has risen superior to the condemnations pronounced against it. Those who condemned it are dead and no one now knows their names, whilst it has survived its enemies as the names of our compatriot Denys and the English Lower its inventors. So it is with all scientific discoveries which official corporations and professional jealousies wish to arrest as they pass. They retard their definite advance, they prevent progress for some years, for one or two centuries, perhaps, as in transfusion: but the light is shown a little later, to the shame of the pretended wise men who have judged bad and dangerous what they had not the intelligence to understand nor the knowledge to study.

Thus it was in the seventeenth century. It is still so in the nineteenth, and will still be so in future centuries. I could cite to you many recent examples, but this would be to place my person on the boards, and I prefer to forbear. Wherever there are privileged teachers whom we commission to judge of what is progressive or discovered, experience shows that impartiality disappears and that the judgments given are inspired only by envy, friendships or self-interests.

Transfusion interdicted by the faculty of the seventeenth century has re-appeared in our days and has saved lives enough to have retaken its citizenship in surgery. As I have related in my "History of Medicine," vol. ii. page 325, it was first thought of in 1657, for the introduction of medicaments into the veins, by Wren, Clarke, Robert Boyle, Henshaw, Richard Lower. This was the idea which in our days modified by Wood became the hypodermic method. As to the transfusion of blood, this had been proposed in 1665 by Lower, who, at Oxford, tried it on dogs, and for the first time, in 1666, was realized in man by Denys of Dijon. His patient recovered. Following his example, Emmerey did the same with a second success.

The other trials were not so fortunate. Instead of attributing them to the procedure, they imputed them to the method. Then the visionaries of the period pretended to make of this treatment a panacea. They were going to restore youth to the aged, virility to the impotent, health to the consumptive, and they even dreamed of lengthening life. It was then that transfusion was forbidden by decree of Parliament at the request of the Faculty in 1675. It was then no more thought of: but in our days, questions of practice are no longer dependant upon the Faculty nor on learned Corporations. Each is obedient to the inspirations of his genius, if he has any, or at least of his knowledge, for those who only have that, a thing that has its own value. Now, in an unlucky day an unfortunate, who was losing his blood by reason of a considerable hæmorrhage, was about to die; blood was injected into his veins, and he was saved. They restored him to life as surely as a drowned person whom we draw out of the water and whom we restore to life. From that day transfusion of blood emerged from the abyss into which official obstructiveness had plunged it.

A great number of transfusions have been made and we count many successes. Quite recently again M. Bitot, of Bordeaux, performed

eight successfully on four of his patients. Only the indications and contra-indications of the operation must be precisely stated.

In my opinion, transfusion ought to be exclusively reserved for excessive anæmias endangering life and due to an arterial or venous wound, to a puerperal hæmorrhage, to certain uterine hæmorrhages, to umbilical hæmorrhages in the newly born (Bélina), to the hæmorrhages of purpura, or to some cases of imminent death from idiopathic anæmia. Every chlorotic blood disease and every hypoglobuly dangerous to life not connected with an incurable organic lesion, may be submitted to this treatment.

I will not say as much for it in cancerous and tuberculous cachexias and some incurable diseases that people have wished to treat by transfusion. The existence of an incurable lesion is a formal contra-indication, and to employ it under these circumstances is to compromise transfusion.

These are the indications for transfusion. But how is it performed? To-day there is no longer question of transfusing the blood of sheep or of any other animal. This method is abandoned. So it is with the transfusion of defibrinated human blood: and after having tried transfusion into the arteries we now generally do it into the veins.

To do this we make use of an ordinary syringe of good quality, of the special apparatus of Bélina, Callin or Mathieu, the description of which is found in our "Dictionary of Therapeutics": or of the very ingenious apparatus invented by Roussel, of Lausanne. A small trocar fitted to this apparatus is placed in the cephalic or basilic vein, or in one of the veins of the wrist or hand.

The blood furnished by a willing subject is gathered into the syringe itself or into the receptacle of the special apparatus which I have named. Some physicians warm the apparatus to 25° or 30° (77° or 86° F.), but this is useless if we operate promptly in five or six minutes: with this promptitude, the blood does not coagulate, and it coagulates even less, it is said, than if we warmed the instruments.

Once the apparatus is charged, we transfuse one hundred and twenty to one hundred and fifty grammes (30 or 42 drachms) of blood in the adult, sixty or eighty grammes (15 or 20 drachms) in children and thirty grammes ($7\frac{1}{2}$ drachms) in the newly born.

After the operation, patients often experience a sensation of well-being: they are a little flushed and are reanimated. During the day they have at times an access of fever with chills, heat and sweat. Some, finally, experience in the evening a sensation of annoying weight in the arm operated upon. That is all.

Accidents of transfusion.—One of the accidents of transfusion is death from embolus, if the blood transfused forms clots, which by their volume may obstruct the exercise of the functions of the vessels. But, in addition to mortal emboli, it causes capillary emboli, giving rise to subcutaneous or visceral infarctus, like that I have described in my "Memoirs on the Infarctus of Diphtheria and Cholera."

Another danger to be feared, rather chimerical than real, is the transfusion of bacteria germs floating in the air, and especially in the air of a hospital ward filled with measles, scarlatinas, variolas, typhus, diphtheritics, etc. In this era of bacterophobia, we ought to be terrified at transfusing into the veins blood which has come in contact with the air and which has traversed apparatus in which is always found a greater or less quantity of disease-bearing dust. But I do not insist. Up to this day no one has spoken of this danger, which ought to be very great, if the bacteria of which they speak so much were as terrible as they are pleased to say.

If we had this fear, there would, nevertheless, be means of dissipating it. It would be necessary to employ the apparatus of Roussel, of which I have spoken above, or the transfusion apparatus, still better known in Paris, and which has been designed and employed by a very skilful surgeon of Bordeaux, M. Oré. This process consists in receiving the blood of the donor by means of a canula placed in the vein and communicating with a receptacle in which a vacuum has been made.

Thence the blood passes by another tube through the canula, placed in the vein of the patient, and the blood passes from one organism to the other without undergoing

contact with the air. This is very ingenious. Some have wished to replace venous transfusion by subcutaneous transfusion, and Karst made trial of it in rabbits and Schareltz in man. The latter even published the most extraordinary fact that one could meet with and of the reality of which it is permitted to doubt a little. He cured a phthisis very rapidly by eight subcutaneous injections of blood in the dose of 40 grammes (10 drachms) an injection, in eight parts of the body, and this at the same sitting. —*Gazette des Hôpitaux.*

LACTOPEPTINE.—This valuable aid to digestion has been before the public for several years, so long, in fact, that there are probably few physicians practicing in cities who have not already tested it thoroughly. To these it is unnecessary to say anything in commendation. To the country practitioner, however, it may be well to again refer to it. In the summer diarrhœas of children we have found *Lactopeptine* of the very highest value. It is probable that weakening of the digestive powers is a very important factor in the causation of Cholera Infantum. We have found *Lactopeptine* a most important help in restoring these cases, when they have passed through the worst stages of that disease, as well as in warding it off when its onset seemed almost inevitable. In the exhausting vomiting of pregnancy, we have found it of very great value in enabling the patient to obtain some nourishment from the food ingested, even if it remained but a short time in the stomach. In the nausea and indigestion and cardialgia, which causes so much annoyance, even if no great danger, in the later months of gestation, *Lactopeptine* has proved itself almost a specific. The article used was manufactured by the New York Pharmacal Association.

CODEIA IN CANCER OF THE PYLORUS.—Prof. Austin Flint recommends 0·06 of codeia most highly in cancers of the outlet of the stomach, saying that in such a case it completely stopped the emesis and pains.

HICCOUGH.—Dr. Ortille, of Lille, reports a case of hiccough, which resisted all the usual remedies, cured by the hypodermic injection of two-fifths of a grain of pilocarpine.

Surgery.

ANÆSTHESIA IN CHILDREN.

BY M. DE SAINT-GERMAIN.

GENTLEMEN,—At the moment of resuming the lectures which for almost six years I have been giving at the Children's Hospital, I think it necessary to inform you of the modification which I intend this year to make in them.

Up to the present I limited myself to lectures strictly clinical, that is to say, to the description of affections which you have before your eyes and of operations which I performed before you, and, save some few lectures published by me on tracheotomy, I forebore to write anything, to cause anything to appear, fearing to be obliged to say one year the contrary of what I might have said the year before.

From this forbearance, it happens that I have seen published in different medical journals, reproductions of my cliniques, representing not always faithfully my views on such or such subject of infantile pathology.

So, on the one hand, to obviate this inconvenience and, on the other, to expose to you as clearly as possible the results of my hospital practice, on which I begin to have the right to rely, I have resolved, (outside of accidental facts which I will have to point out to you, from a clinical point of view, of the various affections peculiar to childhood), to edit and publish these lectures myself.

So this year I will occupy myself with anæsthesia in children, the treatment of fractures, torticollis, scoliosis, and club-foot.

Experience has taught me that orthopædy, from a teaching point of view, does not succeed in massive doses: so I will not administer it thus, and will take care to intercalate between more accessible subjects the different points of this troublesome and arduous study.

Observation and clinical notes will be the basis of these lectures: you will find in them but little history and pathological anatomy; on the other hand, you will see exposed in them, as minutely as possible, the details of my hospital practice. To defend myself in advance from every accusation of plagiarism, I begin by declaring to you

that I have invented nothing of moment; and that such or such procedure, such or such apparatus as I will point out to you without the name of the author, would, if we wished to be impartial, deserve many names, if we held account of the successive modifications that they have undergone before being adopted by us after a last transformation.

In a word, gentlemen, I will strive to give each his due; but if at times I happen, for the sake of clearness, to describe to you an operation or an apparatus as if I had invented them myself, do not accuse me of having appropriated my neighbour's apples, I shall not have done so purposely.

In this lecture, I will only take up chloroform, my experience being absolutely *nil* on the subject of ether, and numerous failures having demonstrated that chloral is only a hypnotic and cannot be used for anæsthesia even in operations of very short duration. I only speak from memory of the protoxide of nitrogen originally advised by Davis, and to-day almost exclusively reserved for the extraction of teeth, of the tetrachloride of carbon, extolled by Protheroe Smith, of bichloride of methylene, lastly of amylene. The greater part of these substances require special apparatus for their employment, and by this very fact would never be generally used.

Giraldès rightly said: If chloroform ought to be banished from surgical practice, it still ought to be retained in the surgery of children. In fact, without mentioning that wonderful fact of the suppression of pain, what precious elements of diagnosis we draw in anæsthesia, and how many questions, if not insoluble, at least very difficult to answer, become clear after the administration of a few grammes of chloroform.

Leaving aside the question of simulation, which, however, has its own interest from the point of view of certain arthralgias and which is thoroughly elucidated by anæsthesia, we might say that at each step the application of chloroform is indicated. I will be within the mark in saying that for six years the number of our chloroformisations exceeds six thousand five hundred.

I take torticollis for example: A child is brought to you with his neck twisted. You come near to examine him, he is afraid, he cries out, he defends himself, impossible to distinguish in the midst of this agitation the part that must be attributed to the pain produced by certain movements or certain attitudes: you chloroform the patient, and after a very short examination, you are ready to state if the torticollis is permanent: if there is contracture or muscular retraction, if there is deformity of the vertebra; in a word, you establish in a sure and positive manner the form and nature of the torticollis you have to treat.

Another example:—A child has fallen on his elbow. The articulation is enormous, the slightest touch is insupportable and provokes cries. What are you going to do? Wait until the effusion has disappeared and permits you to make out the respective situation of the osseous protuberances? This is impossible for you, for the preservation of the movements will often depend upon a prompt intervention. Chloroform administered in this case allows you to recognise the lesion in its truest details. May be you have to do with a luxation, a subluxation, a transverse or vertical fracture of the inferior extremity of the humerus, or, finally, a fracture of the superior extremity of the radius or olecranon. Again, I say nothing of pure and simple sprain of the elbow, the existence of which I do not think it possible to affirm outside of every other lesion without inducing anæsthesia, likewise, in exploring the bladder, and far more in lithotrity, extremely difficult operations without the administration of chloroform.

I remember when I took the service from the hands of our regretted colleague Giraldès, to have been somewhat terrified at the prodigality with which he gave chloroform in examining the eyes of children: since that I have likewise had proof of this resistance, the struggle to be sustained with most of them before uncovering the cornea, the necessity of using specula, instruments which the disordered movements of the child render a little dangerous when we have to do with a softened cornea. I have quite changed my first impression, and I esteem that in unruly children chloroform may be employed with benefit, not perhaps for the examination of eyes, but at least for certain cauterizations which we practise by the help of nitrate of silver, pure or mitigated.

You see, gentlemen, that examples of the indications for chloroform are numerous. I will not give you more, and I will now enter into the subject matter.

First principle.—Use only the best chloroform. In the city, always go to a trustworthy druggist, and take care to specify on your order that you wish chloroform for anæsthesia, the chloroform used in the preparation of liniments and pomades not presenting the necessary degree of purity. In every case, always smell your chloroform before using it; and do not hesitate to reject it whenever this experiment causes you to find an empyreumatic odour or an odour of chlorine, which reveals undoubtedly either a defective preparation or decomposition of the anæsthetic agent.

Although the chloroform of the hospitals is generally good, I remember this very year to have observed the odour of chlorine which I have just cited; and as I believed myself sure of the perfect identity of the chloroform in the hospital, I administered it the same morning to many children. The inhalation of this evidently altered chloroform produced in all my little patients attacks of obstinate cough, and in one of them a true convulsive cough, which did not cease without inspiring me for a moment with some misgivings. I complained to the druggist. He answered that the chloroform was always the same and that I was the author of its decomposition. According to my intern dispenser, the chloroform was decomposed by touching the white compress of linen, that I did wrong to place in contact with the neck of the flask in place of pouring the liquid on the linen drop by drop. I hasten to tell you this explanation is bad and in nowise satisfied me; for, allowing that I always employed the same procedure to empty the bottle, how was it that for the first time only I was called to observe the phenomenon. I caused the chloroform to be thrown away. I asked for other, and stuck to my opinion. Do likewise as occasion offers.

I suppose you supplied with excellent chloroform. The night before, you have advised the parents to give the child nothing to eat on the morning of the operation. Doubtless this is an excellent precaution, and I advise you always to take it; but I hasten to add that your advice will rarely be followed and that for the most part the parents will not have failed before leaving home, or on the way from the house to the hospital, to gorge their children with cakes. Ought you on this account to send them back? I think not: there will result from it for yourself and the child only the inconvenience of more or less abundant vomiting. For certain operations, such as those which are practised on the eyes, it is true, it will be necessary to operate while the child is absolutely fasting, but in most cases it may be overlooked.

Second principle.—Always give the chloroform yourself, and do not confide it to an assistant unless for a very long while you have been able to convince yourself of his prudence and, above all, of the concentration of his attention upon the task entrusted to him. For my part, I am convinced that nine times out of ten accidents under chloroform are due to the negligence or, rather, to the distraction of the assistant, who, by taking a more or less lively interest in the operation performed by his chief, leaves the chloroform compress under the nose or mouth of the patient, looks at the different phases of the operation, and thinks of the chloroform only when it is too late to bring the patient back to life. I am always pleased to chloroform my patients myself until complete resolution, and then only begin the projected operation, taking care to move far away from the patient the compress which I have used to induce anæsthesia. Generally, operations are finished before the patients are awakened; if the contrary should happen, I cause the assistant of whom I am surest to administer a few whiffs of chloroform, for the purpose of prolonging the anæsthesia; if I have no assistant offering sufficiently serious guarantees, I charge myself anew with the anæsthesia and go on with the operation only afterwards.

Third principle.—In whatever situation you may find yourself, never give chloroform alone. In addition to the difficulties which you would experience from the point of view of the struggles of the patient, you might find yourself exposed to serious annoyances, of which quite a recent action at law will give you an idea. Refuse absolutely to give chloroform without help. Refuse equally to give it in your office, and compel the patient to be at his own house, lying in bed and undressed.

Before beginning, you ought to assure yourself that no constricting band exists either around the neck or thorax, and that at any moment, it will be easy for you to uncover the epigastrium. This manœuvre, which will permit you to watch the inspirations, will be your true regulator. It can be accomplished without in the least offending modesty, even in young girls, by leaving covered, either with the shirt or by the help of a sheet, the thorax on one side, the abdomen on the other, and leaving the epigastric region only absolutely uncovered.

The patient lying on his back, with the head on the same plane as the rest of his body and the pillow consequently taken away, you make ready a large handkerchief, folded up in such a manner that by its width it covers the entire face and by its length allows you, on the one hand, to cover the frontal region, and, on the other, may enclose the chin and easily reach the subhyoidean region. It is well for this handkerchief to be thick. Too thin, it would not preserve a sufficient dose of chloroform, and would necessitate its too rapid renewal. I do not advise any of the apparatus specially designed for administering chloroform. Their least inconvenience is their never being at hand when we need them. Your handkerchief being prepared, you empty on its lower part a dose of chloroform sufficient to soak it thoroughly, and you present it to the patient in such a manner that with your left hand pressing the upper part on the brow intercepts the air from that side and, at the same time, maintains the head in the position which you have given it, while your right hand carries the inferior border, wet with chloroform, a little beneath the chin, so as to inclose it as in a kind of cup. Surprised at this unexpected manœuvre, the patient seeks to escape the inhalation of the chloroform, and I have seen very few children willingly lend themselves to the beginning of this operation, even then, in place of, as it were, stunning the patient, as I do, they proceed by insinuation, holding and shaking the handkerchief quietly at a certain distance from the nostrils and mouth. One of our young *confrères* has published, in a work on chloroform in children, that we ought to administer chloroform to them as though playing with them. I confess never to have had this possibility, and, whatever kindness, whatever patience we make use of at the beginning, we finish always by what I believe far more practical to begin with, viz., giving it by force. It was in reference to this that I recalled to you the necessity of putting chloroform only at the bottom of the handkerchief so as not to apply the wetted portion upon the mouth or, still more, upon the eyes. I have seen in a young girl chloroformed without this precaution an acute conjunctivitis which was not slow, thanks to an epidemic of diphtheria we were passing through, to become infected. The patient is kept steady; his arms, legs, and head are well fixed, and the chloroform begins to be evaporated. Some children, at this moment, continue the cries they emitted before the application of the handkerchief, and under the influence of these cries, great respiratory movements are produced: anæsthesia is at times produced with great rapidity. Such is, however, not the rule, more often the child defends himself in his way and refuses to respire. I have seen children resist twenty, thirty, forty-five seconds before making an inspiration. This inspiration is at last produced, however, and the examination of the *creux epigastrique* reveals its intensity. After this first inspiration, a period of rest is manifested, and to obtain a second, then a third, I press quite strongly with the ends of the fingers upon the *creux epigastrique*, and this manœuvre most often suffices to restore the rhythm of the respiration. Children, you know, as well as many women, do not pass suddenly through the phase of agitation to arrive at the period necessary to obtain, calm supervenes, the eyes remain wide open, or are agitated by slight convulsive movements, the pupils, at first largely dilated, are contracted little by little: we have reached the period of tolerance, to which soon succeeds the period of resolution. In reference to this, I have often sought with my interns if the law of contraction of the pupils coincident with complete anæsthesia, was as exact in the child as in the adult; and I confess to have found it very often defective: most often the period of resolution is produced insensibly, and one might very often be embarrassed to recognise that it has arrived, if one did not have, on the one hand, the

experiment of the preservation or non-preservation of the sensibility and this by lightly pinching the skin of the belly or thigh, and, on the other hand, that loud respiration to which is given the name of stertorous. Most often when this phenomenon has been produced, anæsthesia and resolution are obtained.

Then throw far away from you the chloroformed compress, and do not expose yourself to the danger which consists, as I have seen, in turning over the patient, if we have to do with an operation for *fistula in ano*, for example, in such a manner that his nose rests on the compress charged with chloroform. The little girl who was the victim of this imprudence, or rather of this negligence, stopped breathing before my eyes, and would certainly have died had not the operation been of short duration.

Your operation is finished, the patient's wound is dressed, and still he is asleep (anæsthesia is very often prolonged beyond the time necessary for the operation): we see the parents, in their affright, asking for the child to be instantly awakened. Although I hold myself absolutely quiet when the respiration is rhythmical, I think it necessary to break the anæsthetic sleep and, above all, to chase away from the bronchi the chloroform which they still contain. With this intention, I lash the cheeks of the child with a wet towel, or rather, I slap them quietly, but always in the same place. This continuous percussion between the ear and the cheek has furnished me with excellent results in some cases which gave me trouble. I find this treatment much better than that which consists in suspending the patient head downwards, it is also much easier to repeat. After the patient has cried two or three times, the effect is produced, and we may give it up.

We would be greatly deceived if we believed that the time necessary to obtain anæsthesia is in direct ratio to the age of the children, and that more chloroform is necessary, and more time, in a child thirteen years old, for example, than to obtain the same result in one six months old. Practice often comes to demonstrate this proposition, and on a certain number of observations I have drawn up a table, which will show you, with but few exceptions, what I advance.

Let us note, in passing, that the application of chloroform by *sidération*, in the adult, has the great advantage of avoiding those painful wanderings, those unlooked-for revelations, which, however great care the surgeon may have taken to remove interested parties, may have a very bad effect.

There is more: I have had occasion to administer chloroform to twelve adults by the method which might be called *sidérante*, and I have always been struck by the extreme rapidity with which complete anæsthesia was thus obtained.

Certain children require particular precautions and special watchfulness: I mean very anæmic children and those attacked with bronchial catarrh. In the first, anæsthesia is extremely rapid, but, as Chassaignac observed, it is absolutely necessary in them to avoid sudden changes in position during anæsthesia, and notably the too rapid passage from the horizontal to the sitting position. This manœuvre, dangerous in all subjects, offers, above all in these, a special gravity, on account of the frequent tendency to syncope. This reflection is, above all, inspired in me by the recollec ion of a very anæmic child, twelve years of age, whom we chloroformed this very year for the application of the actual cautery to the knee. The inspirations were made regularly and anæsthesia was complete: hardly was the patient moved even slightly for the cauterisation when the respiration suddenly ceased, paleness became extreme, and for some moments we were obliged to practise artificial respiration, in order to cause this alarming condition to pass off. This, however, of the considerable number of children whom for six years we have submitted to the action of chloroform, was the only one who had inspired us with real anxiety. Allow me to say, in reference to this, that the true method to employ in accidents of apparent death, after the administration of chloroform in children, consists in artificial respiration practised by rhythmical massage of the sides. I much prefer this immediate, instantaneous method, to artificial respiration practised by the aid of the laryngeal tube, for which a certain dexterity is requisite, and to the application of electricity, which we never have immediately

at hand, and which consequently has the inconvenience of always arriving too late. Children attacked with bronchial catarrh take, on the contrary, very long to anæsthetise, and danger might arise from the relatively much greater quantity of chloroform it is necessary to make them absorb. So in them it is especially necessary to watch with the greatest care the inspirations, and after they cease to provoke them by producing them regularly by sudden pressures on the epigastrium. It will be equally necessary, in these subjects in particular, to watch over the sudden congestions, which manifest themselves by a very peculiar flushed condition of the face, and from this moment to cease the inspirations of chloroform.

I ought to say in reference to the manœuvre so frequently employed in the adult, and which consists in traction of the tongue outwards by the help of forceps, in order to prevent the application of its dorsal surface against the velum palati, that I have had only one single occasion of putting it in practice, in a large boy fifteen years of age, and this was held to prove that this manœuvre, so useful in the adult, is rarely indicated in the child, by reason of the extreme rarity of the accident itself.

I come to the contra-indications of chloroform in cardiacs. It ought to have happened to me, amongst the number of children whom I have anæsthetised, to meet with patients attacked with diseases of the heart, and I have never had accidents to deplore. I might argue from this that heart diseases do not constitute an absolute contra-indication of chloroform, but I prefer to report to you the case of a patient whom my friend and colleague, Dr. Labric, confided to me, and who was manifestly attacked with a hypertrophy of the heart. It was absolutely necessary to perform on this patient straightening of the cervical region, which had already for a long while been the seat of a chronic arthritis. We anæthetised on many occasions the little patient, with a certain slowness, it is true, and an increase of precautions relative to the inspirations, and each time this operation was brought to a happy issue without the slightest accident.

One might then advance that chloroform may be employed in all children without distinction. This is not so for the application of chloroform to all operations.

In fact, without mentioning tracheotomy, for which no one, I think, has ever proposed anæsthesia, inasmuch as in a large number of cases the patient is very anæsthetic on account of the affection itself. I believe, in spite of the practice of the English surgeons, that the administration of chloroform is most dangerous in amygdalotomy: it is so in harelip. Although I may have often given chloroform in a like case, I often find myself obliged to suspend the operation to allow the patient to breathe at the time of paring the strips. There falls at this moment into the buccal cavity a considerable quantity of blood, which, not being expelled by the anæsthetised patient, may be engaged in small quantities, it is true, in the respiratory passages. The time of awakening is less dangerous, by reason of the precautions we may take against this accident by causing the two strips to be strongly compressed by the fingers of an assistant. I advise then, especially in very young children, to abstain from chloroform in the operation for harelip.

The cares consecutive to the administration of chloroform have no special feature in children. It is, however, good to strive against the natural sleep, which in them often follows the sleep due to chloroform.

If it is in fact absolutely exceptional (I have never observed it but once) to be able to make the anæsthetic sleep succeed without transition to the natural sleep, it is, on the contrary, extremely frequent to observe a deep irresistible sleep succeed to chloroformisation, at the same time that the patient has been perfectly awakened soon after the operation. I do not think that there may be any veritable danger in this: it is, however, a good thing not to allow the child to be given up to this sleep, were it only to reassure the parents, who imagine that the anæsthetic sleep is not broken up and that the child will not awaken. So it is my custom to cause a strong infusion of coffee to be administered by spoonfuls. It is a good thing to advise the parents to allow the child to eat only three hours at least after the patient awakes: otherwise, one might expose

himself to see vomiting supervene, which it s at times difficult to overcome.

One word more before finishing. People have often attempted to dissuade me from administering chloroform to scrofulous and tuberculous children, in whom a painful operation, and notably the dressing of a coxalgia, was to be performed. The child might, they tell me, be seized with accidents of granular meningitis, and the parents would not fail to accuse you of having given rise to these accidents by the administration of the chloroform.

Convinced of the harmlessness of the anaesthetic agent and of its great utility in this class of cases, I have never given way to these counsels, and accepting the responsibility of my acts, caring very little, above all, for the absurd accusations of which, in case of complication, I might become the object, I have always practised the precept "Do your duty whatever happens."

The moment has come, I think, to repair an omission, which I acknowledge I have made purposely. You have probably remarked that in watching the patient submitted to chloroform we have not consulted the pulse. In fact, I believe this investigation useless, and perhaps even dangerous, if we trust to it in an exclusive manner; in this sense, that it has been observed that the pulse is still perceptible in a very clear manner at the time that the respirations have been wanting for a time already quite long and that, consequently, the position of the patient is as critical as possible.

Huge Vesical Calculus—Dr. Brown, of Barnsbury, brought to the first meeting of the Islington Medical Society, on the 22nd ult., a human bladder, containing three stones, weighing in all one pound and a quarter, less 20 grains. The largest stone weighed ¾ pound, less 20 grains; the next ½ pound, less 40 grains; the third 40 grains.

Dermoid Cyst in the Floor of the Mouth.—Guetterbock reports a case of dermoid cyst, the size of a hen's egg, in the floor of the mouth of a man twenty-six years of age. It was successfully removed.

FRACTURE OF THE STERNUM.

BY H. T. MACHELL, M.B.

Read before the Toronto Medical Society.

Was asked to see Mrs. McMullen, 54 years of age, on the morning of the 22nd of October, 1878. She said, the night before, after undressing for bed, she had gone to the head of the stairs to call her daughter, but failing to make her hear, had attempted to go down, and on stepping on the first step it gave way, precipitating her to the bottom, a distance of sixteen or seventeen feet, stunning her thoroughly for the moment. She was unable to move, and had to lie where she was till her son and daughter came in, when they managed to carry her up to bed. As to how she reached the floor, or what she struck against, she could give me no information. She had slept none all night, and was then complaining of great pain over the breast-bone and on both sides of the chest. In fact, she complained of being bruised almost all over the body.

The pain over the sternum gave her the most annoyance, and on examining it, found it exquisitely tender to the touch, swollen, and considerably ecchymosed. A slight depression could easily be seen about the centre of the sternum, and by passing the fingers over it gently (the slightest pressure causing intense pain), some displacement could be made out. The parts were so tender that the manipulation necessary to obtain crepitation could not or would not be endured. On examining the left side, I felt greatly confident there was also a fracture of the eleventh rib.

I merely gave morphia in sufficient doses to relieve pain—the suffering, on attempting to move her even very slightly, was so great that I did not apply anything in the shape of a roller or adhesive straps to give support to the chest or relieve the intercostal muscles of part of their work. After three or four days the extreme sensitiveness disappeared. I then found that I had been mistaken concerning the rib. There was no fracture—it was merely a severe bruise, but I was able to make out that the fracture of the sternum was a transverse one between the third and fourth ribs. The lower fragment was the more prominent, and rode over the

lower end of the upper one, so that a sulcus, almost deep enough to lay a finger in, was produced. Once or twice I thought I was able to make out crepitation, but was not very certain. At all events it was not very satisfactory. She complained of almost constant pain at the seat of fracture, at a point directly opposite in the spine, and just beneath either clavicle, especially when she made the least movement. After giving her a good deal of pain I managed to get a binder of factory cotton around the chest, with a pad over the lower fragment. A small pillow was also placed just below the shoulders, so as to bend the chest backwards. This seemed to restore the parts to nearly their natural situation. As soon as the pillow was in place she volunteered the information that she was more comfortable than she had yet been. The bandage has been tightened and the pillow adjusted occasionally since then.

Four days ago I saw her. She was able to sit up in bed, and almost all the tenderness, discolouration, and swelling had disappeared. I might say she has no pain now at all, except when she moves. Movement from side to side, or reaching out any distance with either arm, or coughing severely, reminds her that she has a sternum. The chronic bronchitis and emphysema, which she has had for a number of years, seems to be considerably worse since her accident.

If the case progress as favourably as it has done so far, I suppose in the course of a few weeks my patient will have a practically useful sternum.

According to Gross, fracture of the sternum is not so very infrequent; but as I have neither had a case before, nor seen one, nor heard of one in the practice of my medical friends, I have thought it of sufficient interest to relate to the Society.

Sodium Ethylate a Cure for Nævus.—This substance is prepared by adding metal sodium piece by piece to absolute alcohol, in a wide mouth bottle, until effervescence ceases, when a deposition of a crystalline substance —$C_2 H_5 NaO$ —occurs. The clear liquid is the part used. It is a potent caustic, causes less pain and scarring than nitric acid, and has been very successfully used for removing nævi.

Surgical Wrinkles.—Dr. John H. Packard, of Philadelphia, at a Conversational Meeting of the Philadelphia County Medical Society, made some remarks on practical surgery, of which the following is a brief summary. To avoid scarring in making superficial incisions he divides the skin obliquely. In introducing wire sutures he uses a needle with the eye near the point, passing the needle through the lips of the wound and then threading it. In using the ligature (and especially the elastic ligature, which he favours), for fistula in ano, he passes a bulbous probe through the fistula into the bowel, then the ligature is carried into the bowel on the top of the forefinger in the cleft between the free extremity and the nail; the probe is then slipped alongside of the finger, which is withdrawn, leaving the ligature; the latter is then twisted by its two ends until it grasps firmly the extremity of the probe, so that in withdrawing the probe the ligature is carried through the sinus. To tighten the elastic ligature he crosses the two ends and ties an ordinary ligature around them. Dr. Packard frequently makes use of reflected light by means of the laryngeal head mirror to examine the ear, rectum, or vagina. For the short operations of minor surgery, the reduction of dislocations, or opening of abscesses, the first insensibility from ether is of great advantage. Let the patient take the ether inhaler, or a sponge wet with ether, in his own hand, directing him to hold the other arm up in the air. After breathing the ether for a few minutes, the arm will drop, and you will have from 30 to 50 seconds of unconsciousness in which to operate. The sponge is removed, and the patient is ready to go about his business. It gives rise to no headache, nausea or other unpleasant symptom, and is particularly useful in children. The chief source of disappointment is in not recognizing the right moment, for if this is allowed to pass, unconsciousness will not again occur until full etherization. The first insensibility is sure to come. When the arm wavers, be ready, and as soon as it drops perform the operation. There will be no pain felt.—*Phil. Med. Times.*

Appointments.—Dr. James B. Hunter, of New York, has been appointed attending surgeon to the New York State Women's Hospital.

Midwifery.

THE TREATMENT OF PREGNANCY COMPLICATED WITH CANCEROUS DISEASE OF THE GENITAL CANAL.

Dr. Herman read a paper on this subject. He first narrated two cases which had come under his own care. In one, labour was obstructed by a cancerous tumour of the rectum; the patient was delivered by cephalotripsy, and died from peritonitis. In the other, the cervix uteri was fixed by cancerous disease; abortion was induced at the end of the fifth month; the patient lived seven months afterwards, marked relief to the symptoms having followed the abortion. Then followed an analysis of one hundred and eighty recorded cases, collected from different sources, and classified. From them he drew the following conclusions: 1. That whatever influence cancer of the uterus might have upon conception was adverse to its occurrence. This was inferred from the small number of cases in which the patient was suffering from cancer at the time conception took place, as compared with the frequency of the disease. 2. That cancer of the uterus tended to produce the intra-uterine death and premature expulsion of the fœtus. This conclusion followed from the large proportion of premature births and of not only still-born, but decomposing children. 3. That the growth of cancer of the uterus was, as a rule, accelerated during pregnancy. This was supported by *à priori* arguments from general pathology, by the analogy of the breast, and by the improvement which often followed the termination of the pregnancy. 4. That with cancerous disease affecting the whole circumference of the os uteri, labour might be quick and easy, and the patient might recover well and live for months afterwards. 5. That when delivery under such conditions was accomplished by natural efforts, expansion of the cervix usually took place by fissuring. 6. That this fissuring did not usually augment the risk to the mother. 7. That imitation of this natural process, by making incisions, neither increased the danger at the time, nor accelerated the progress of the disease subsequently, and that it often greatly facilitated delivery. 8. That the cases in which the cancer formed a tumour of great size or hardness were the ones in which delivery by natural efforts would not take place. 9. That where the above characters were absent, no definite criteria could be drawn from the local conditions by which to foretell the behaviour of the os uteri during labour. 10. That where delivery of a living child *per vias naturales* was impossible, such limited experience as we had showed that there was but little difference, as to risk to the mother, between craniotomy and Cæsarean section. 11. That a part of the cervix uteri might with safety be removed, either during pregnancy or during labour. These last eight conclusions were supported by the evidence of recorded cases. The author then considered, from these data, the practice to be followed. He assumed that the life of the mother was the first consideration, and that the production of abortion was justifiable if maternal life could be saved or prolonged thereby. The following were the rules of practice which he thought were indicated: 1. That where it was possible to remove the disease, either during pregnancy or at the time of labour, it ought to be done. 2. That where this could not be done, the safety of the mother was best consulted by bringing the pregnancy to an end as soon as possible. 3. That when labour had actually come on, expansion of the os uteri should be aided by making numerous small incisions in its circumference. 4. That dilatation of the cervix uteri being in progress, if uterine action should be deficient, and it should become necessary to accelerate labour, the use of the forceps was, as a rule, better than turning. 5. That when dilatation of the cervix uteri could not take place, even after incisions had been made, either from rigidity or magnitude of the tumour, Cæsarean section should be performed.—*Obstetrical Society of London.*

TREATMENT OF THE HÆMORRHAGE FOLLOWING ABORTION.—Dr. Boiters, of Berlin, dilates the cervical canal, injects a 3 per cent. solution of carbolic acid, and then goes over the whole of the inner surface of the womb thoroughly with Simon's spoon, after which the carbolic lotion is again injected. This method is claimed to be not only innocuous, but especially valuable in cases in which the uterus and surrounding tissues are in a condition of inflammation, and in which the uterus is bound down by adhesions.

ON SOME REMEDIES CAPABLE OF ALLEVIATING THE PAIN OF UTERINE CANCERS.

Dr. Aus-Laurence has tested comparatively various remedies for mitigating the pain of uterine cancer. From his observations, which were, however, few in number (20 to 30), it results that in cancer of the uterus, the ergot of rye, administered in doses of 30 minims every six hours, affords more relief than any other of the remedies commonly employed. It specially dissipates those pulsatile pains which commonly yield only to hæmorrhage. It probably acts by diminishing the afflux of blood to the womb.

The hydrate of croton chloral is also very powerful against the pains of uterine cancer. But it is adapted rather for those painful irradiations which are observed in loins and thighs and back, than for those manifested at the seat of the disease.

As a local remedy, the author prefers carbolic acid. It is applied to the affected parts with the aid of a speculum, by means of a tampon of cotton wool dipped in a concentrated solution; and the patient is made to take an injection of glycerated carbolic acid, night and morning. Lastly, recourse may also be successfully had to the application of small blisters over the kidneys, which may be dressed with a morphinated ointment.—*Lyon Méd., Jl. de Therapeutique.*

University of Glasgow.—At the medical examinations held in October last, each candidate had to perform on the dead body a given dissection, and on this dissection he was further examined, or, it might be, on some portion dissected by another student. It was found that the plan could be very easily carried out; and the arrangements made by Prof. Cleland were such that two subjects would be sufficient for eighty students.

Hamilton Medical Society.—The following officers have been elected for the ensuing year:—President, Dr. G. McKelcan; Vice-President, Dr. Mullin; Secretary, Dr. Wolverton.

Original Communications.

CASE OF TUBERCULAR MENINGITIS OCCURRING IN THE WARDS OF THE HAMILTON CITY HOSPITAL.

BY T. W. MILLS, M.A., M.D.,
Resident Physician.

I submit an account of a case of *Meningitis Tuberculosa*, the diagnosis of which was made shortly after the patient's admission to the hospital, and confirmed by the autopsy, hoping that the subject may not be without interest.

Sept. 10. The patient, John ——, æt. 16 years, was brought to the hospital about noon to-day—his father stating merely that he had been treated by Dr. —— for remittent fever, and that his bowels had been moved only once, during the last seven or eight days; that he had vomited frequently. With this meagre history the boy was left with us—the father having suddenly disappeared while I had for a moment turned to attend to some other matter.

Condition on entering the Hospital.—The lad has a very scrofulous look; presents evidences of early rickets; is considerably emaciated. He is in a very filthy and verminous condition; expression of face pale and distressed; abdomen tense, retracted, boat-shaped; tongue a typhoid look; pulse strong, and but slightly, if at all, irregular—76 per minute.

Temperature $100\frac{2}{5}°$; respiration irregular. No paralysis of any kind. Liver and spleen normal as to area of dullness; heart natural, except that the first sound is weak. Lungs, on account of patient's crying and restlessness, cannot be carefully examined, but seem healthy. Right pupil contracted—left dilated.

He has vomited once since admission—ordered milk diet with lime water. Later he began to cry out loudly, referring every now and then, as he did for days, to his head. "Oh! my head," and passing his hands frequently over the crown and back.

Sept. 11. Had a fair night's sleep. Food not retained very well; mustard applied to epigastrium. Beef tea added to his diet. As he is still restless is ordered chloral gr. xv, and a few hours later grs. xx. The latter was followed immediately by sleep.

Later: He does not vomit his food, but takes it only by dint of forcing and coaxing. Could not pass urine during the day. As he opposes violently the introduction of the catheter, he is tried in the sitting posture, and then succeeds with difficulty in emptying his bladder. Pupils variable; at times small and not responsive; again dilated and responsive. Pulse, a.m., 74, p.m., 70, irregular. Temperature 98⅖°. Condition in other respects much as before. As his own and family history were gathered with difficulty in scraps, it is presented nearly in the way obtained.

Sept. 12. A very large dose of Ol. Ric. moved the bowels; stool passed in bed; moderate doses of chloral control restlessness; pupils do not respond readily to light; urine examined—not albuminous. Temperature a.m., 99⅜, p.m., 100°. Pulse a.m., 74, p.m., 70, irregular. A sister who does not live at home states that the boy has been employed in a tobacco factory "to stem"; both parents drink; take his earnings, and often the unfortunate youth has gone to work in the morning without victuals at all—this state of things having existed for some time. She thinks her brother had considerable fever for a few days (was ill from seven to ten days before admission); had now and then complained of his head, especially of pain in the crown for some time, but for the period specified above this was the most marked symptom. He has been losing flesh and failing for some little time—she cannot say how long—at least for six (6) weeks. All of importance that can be learned of the family history is that her mother's brother died of phthisis, and one brother died in infancy (nine months)—cause unknown. "He seemed to pine away."

Sept. 13. General condition much as yesterday; takes nourishment fairly. Left pupil more dilated than the right. Temperature, a.m., 98°; pulse, a.m., 100°, small; p.m., 66°, irregular. Bowels moved once by a purgative chloral, grs. xv, at night.

Sept. 14. Did not rest well; pupils as yesterday. Respiration when closely watched found to approximate the Cheynes-Stokes type.

Sept. 15. General condition much as before, but inclining to stupidity; he whines but little; this state of things taken advantage of to examine the lungs more carefully. Dulness on percussion in both infra-clavicular spaces. Pulse, a.m., 75°, irregular, strong; temperature, a.m., 98°, p.m., 99⅕°. Pulse and respiration more regular in sleep. Had no chloral last night—did not sleep—very restless. Night nurse reports that he pulled his shirt completely off four times.

Conversed with another sister of the patient's to-day, who confirms the statements of her sister, and lays stress on the extent to which the boy has been subjected to hardships—the patient has been plainly suffering from partial and continued starvation.

Sept. 16. Saw patient early this morning. The eyes were then drawn to one side; the head retracted; mental condition inclining to stupidity. Motion of bowels without purgative, passed in bed as were all his motions. Urine voided with difficulty: shows no albumen in testing. Pupils this morning as before (right contracted, left dilated); in evening both equally and widely dilated. Towards evening the patient brightens up, but is still delirious; is constantly picking at the bedclothes, or moving his hands in the air, as if catching at objects he sees; movements sometimes seem perfectly aimless; holds firmly any object he grasps; twitchings of upper extremities and mouth noticed. Temperature, a.m., 98⅕°, p.m., 98°; pulse, a.m., 88°, regular, p.m., 92°, regular.

Sept. 17. Pupils equally and moderately dilated; eyelids half-closed, showing the sclerotics; eyes seem rolled up and somewhat fixed; retraction of head continues; trismus for a few hours; twitchings, &c., most worked in upper extremities; very little fretfulness; considerable stupor. As he has passed only about 2·4 oz. of urine in 24 hours, two pints were drawn off with the catheter, bladder was ascertained to be distended by percussion (absence of paralysis). No chloral given last night; did not sleep well. Temperature, a.m., 99⅖°, p.m., 100°.

Sept. 18. Condition in most respects as yesterday; urine drawn off as before; catheter is resisted at the neck—when resistance yields the instrument enters suddenly (spasm of neck). Stupor continues. Temperature, 100⅖° a.m.,

99$\frac{3}{5}$° p.m. Pulse, a.m., 116°, p.m., 108°, both regular.

Sept. 19. Face flushed in areas with paler intervals; the nurse reported having seen this morning certain purplish spots on the cheek, "as though some one had pressed it with his fingers."

At 4.25 p.m. the pulse is 160°, regular. Temperature has risen to 103°, and it is evident that death is approaching. The patient is now carefully examined for indications of paralysis.

The left leg does respond somewhat to the prick of a pin, but not the right, which on this account, and from its position (everted), is considered paralysed. Uses his hands feebly.

Sept. 20. Patient sank gradually, had no convulsion, and died quietly at 8 a.m. to-day.

Before passing on to the autopsy and pathology, a few remarks on the case, clinically, may not be out of place.

Although in this instance the phthisical family history is not very direct or clear; yet the patient himself was evidently strumous, and had, it would seem, been at some period the subject of rickets. Thoughtful men are now questioning as to where to draw the dividing line between scrofula and tubercle. This case formed, further, no exception to the rule that there is almost always, if not quite invariably, a prodomal stage of decaying health, so gradual, it seems to be, as to escape the notice of the less interested and observing of the sufferer's friends. A large array among the predisposing causes of the formation of tubercle in the brain or elsewhere, had in this case had full scope for a considerable time—such as imperfect ventilation, dirt, wretched housing and clothing, an unhealthy occupation, mental worry, and most notable in this case, food of such quality, and so deficient in quantity, that the unfortunate youth seems rarely to have known what it was to be free from hunger, at least during recent months. An absence of some of the common symptoms in this case, and the presence of a large number of diagnostic ones, renders it not a little instructive. The vomiting, as in all such cases, was without effort, and followed by no prostration; while the constipation was relieved by moderate doses of purgatives. On this point authorities are greatly at variance; some stating that the strongest purgatives have no effect, while others maintain that the constipation is readily overcome. The latter is, in most cases, probably more nearly correct. The pulse and temperature it will be seen were typical. The *pulsus cephalicus* was well demonstrated in at least two of its stages—that of slowness with irregularity, followed by rapidity and regularity (or irregularity sometimes). The temperature curve copied from the chart shows surely irregularity enough: Sept. 10th, 100$\frac{2}{5}$°; Sept. 19th, 103°.

The irregularity is of a triple kind:

1. There is *no uniform* elevation in the evening.
2. It varies much from day to day.
3. It has no definite relation to the pulse.

The breathing deserves more than a mere record. Cheynes-Stokes respiration, it would appear, has been observed in a certain proportion of cases. Both the breathing and the pulse were comparatively regular during sleep; a matter worth a thought, as to "sighing," the term could never in the slightest degree be applied in this instance. If we assume the existence of the following three stages:—1. Brain Irritation; 2. Pressure; 3. Paralysis, it will appear (though all such divisions must fail to a greater or less degree to correspond with nature) that the patient must have passed through the first stage before he was brought to the hospital. He had, when in the wards, on no occasion manifested symptoms of photophobia or intolerance of sound, nor was the temperature ever high before the fatal end was close at hand.

Commonly, both urine and fœces are passed in bed. There may be retention of urine however either from paralysis of the bladder or from spasm of the neck, which latter was, I am satisfied, the condition in this case. [See notes.] The urine was febrile, but in no instances was albumen or sugar detected. It seems sugar has never been found in this disease in the urine. The retraction of the abdomen was most marked; in fact, could not have existed to greater perfection or have been more suggestive of the "boat-shape." It will be

noted, too, that there was opisthotonos of moderate degree, and trismus of transient duration. The expression of face, the knitted brows, the whining cry, with but brief intervals of repose, the complaint as to the head, were so marked that the diagnosis was most strongly suggested by these symptoms alone. Once carefully noted, these points never fail to *suggest* the diagnosis in any case afterwards.

The absence of a convulsion entirely; of facial paralysis; of squint, a common symptom —indeed, of all actual paralysis till within a few hours of death, are not a little remarkable and somewhat inexplicable in the light of the extensive lesions revealed by the autopsy. From the all but constant dilatation of the left pupil during a considerable period, we must infer, as would be natural enough in M. tuberculosa, that the pathological phenomena were more marked on one side than the other of the brain. But a word or two in regard to paralysis. It is not common for both limbs on the same side to be paralysed. Again, there may be no absolute and total loss of power, but simply a greater weakness of one limb than another. That such was the state of things in this case, I am satisfied, though I hesitated to record the observation. There certainly was a tendency to L. facial paralysis—a tendency to ptosis, to strabismus [see notes]; but they were neither strongly pronounced nor persistent. Such phenomena, it will readily be seen, might escape from their transient nature the busy practitioner in private. There was marked tonic spasms of a large number of muscles.

Then, as the autopsy shows, the principal lesions were at the base of the brain, it is a little peculiar that the patient, instead of referring the pain to the temples, should have complained throughout of the crown and back of the head. It will be noted, however, later, that the scalp was adherent at the back. The taches méningitiques, on which Trousseau lays such stress as a diagnostic sign, are very lightly spoken of by other writers, among them Vogel. Certainly, if the diagnosis in this case had not been made before their appearance, it would have borne a very close relationship, in point of time, to the autopsy. As to the fatal issue, it is so much the rule, that the best observers state that cases of recovery from well-marked tubercular meningitis are unknown, and that so-called cases of recovery from this malady are simply examples of errors in diagnosis.

Autopsy made Sept. 21st, 28 hours after death. (Several members of hospital staff present—Virchow's method followed in this and all autopsies.) *Rigor mortis* well marked; body that of a rather tall, slightly-made youth, considerably emaciated. Instead of giving a copy in full from the autopsy book, I shall tabulate, in a brief but instructive and striking manner, in two columns, the relations between the morbid anatomy, &c., in this and a typical case; which latter it so closely approaches as to be worthy, I venture to suggest, of special notice, and this is one of my chief reasons for laying the case before the profession.

Typical Case.	Present Case.
1. Scalp anæmic and adherent.	1. So — congested in patches posteriorly and attached in that situation.
2. Hydrocephalic effusion.	2. 2-3 oz. of a serosanguineous fluid escaped when the cranium removed.
3. D. mater may be adherent or not.	3. Not adherent — its veins moderately distended.
4. Tubercles but rarely found in D. mater.	4. Not found.
6. Veins of the surface of P. M. deeply engorged; or only moderately so, (pressure.)	6. Veins engorged.
7. May or may not be obtrusive evidence of pus.	7. Ordinary observation discovers but very little pus.
8. Deposits of lymph along central track of base of brain; minute extravasation of blood in various parts.	8. N.B.—A deposit of lymph, partly opaque—mostly of a clear, very light amber colour — of considerable depth extends from optic foramen to posterior margin of *pons varolii*, and thus burrows in the nerves all along this tract.
9. Opacities of arachnoid—most marked at base.	9. Exactly so.
10. Congestion of vessels moderate in various parts owing to pressure from effusion.	10. Five vessels of the P. M. filled with crimson blood, but not engorged. *Puncta vasculosa* of brain substance fairly distinct.
11. N.B.—Miliary tubercles of various sizes and in different stages of development in the P. M., following especially the course of the vessels, and *above all, the M. cerebral artery; where alone they may be found.*	11. N.B.—Well represented in this instance; the majority were not gritty; most abundant along course of M. cerebral, where they are clustered in scores.

12. Convolutions flattened from pressure.	12. Moderately so.
13. Deep central softening; red or white.	N.B.—On opening the ventricles a pink and white fluid of the consistence of cream found; floor of ventricles so soft it can be washed away by a gentle stream of water *let fall upon* it.
14. Engorgement of choroid plexus.	14. In this case thickened, softened, engorged.
LUNGS.	
1. Tubercles found in lungs, and in the pleura; in lung tissue beneath the pleura; not usually confined to apices or any one locality; may produce calcification of coats and occlusion of vessels.	1. Pleurae not adherent; lungs crepitant throughout—are spots of congestion; tubercles in both pleuræ and in different parts of both lungs; most numerous beneath the pleura a little way. Not so numerous as in brain and spleen by any means Vessels occluded and calcified.
SPLEEN.	
1. Often enlarged; then not so generally tuberculous.	1. Not enlarged; capsule covered with tolerably large translucent, smooth tubercles. Pulp *stuffed* with smaller ones, many of them gritty.
Kidneys may contain tubercles, but less common.	No tubercles found; capsules attached in parts rather firmly.
Intestines may contain tubercles—likely, if they exist, to be in Peyer's patches.	None found.
OMENTUM.	
Often studded with tubercles.	Tolerably large, gritty, and abundant.

The other organs presented no special morbid lesions, and hence all notice of them is here omitted.

Certain eminent pathologists, among them Buhl, lay stress upon an original *cheesy focus of infection*, as giving rise to tubercles in every case in which they are found. This focus may ultimately itself disappear. In this, as in hosts of other cases, no such cheesy focus was found.

Wet pepper, it seems, throws off great quantities of carbonic acid gas. On board an English steamer in a Chinese port lately, a quantity of pepper was taken on board, a part of which had been wet with rain. Next morning a Chinaman went into the hold and fell senseless. Four English sailors went down to render assistance; they, too, became senseless; and finally all five, after a ventilation of the hold, were found dead.

Translations.

The Management of Compensatory Affections of the Heart.

The first effect of a mitral insufficiency or stenosis will be to produce a distension of the left auricle: on the one hand, because the blood passing slowly from this latter into the ventricle will have a tendency to accumulate; and on the other, because at each ventricular systole a portion of the blood will flow back into the auricle. After the lapse of a certain time this distension will reach the pulmonary veins; then little by little a stasis in the lesser circulation will supervene. In order to overcome the obstacle thus presented to the performance of its functions, the right ventricle will increase its muscular action, and will become hypertrophied, and at the same (?) time dilated. This difficulty will react upon the corresponding auricle, and the whole venous system, which empties into it, will in turn participate in the distension. Then the left ventricle will commence to modify its mechanism, because, the greater circulation being in turn affected, it will be forced to take on compensatory action and struggle against the obstacle thrown in the way of its functions. It will become hypertrophied and dilated. But, in the course of the vascular system important organs are comprised which exercise a preponderating influence in the formation of the blood—the liver and the kidneys. Thus to the mechanical disturbance of the circulation there will succeed, little by little, profound alterations of the blood, whence arises the condition designated by the name of cardiac cachexia. From the knowledge of this evolution are deduced the principal indications for the treatment of those affections of the heart known as compensatory. To keep the heart equal to its task by respecting the hypertrophy instead of combating it, as was formerly done, is the first indication. But it must not be forgotten that all exaggerated physiological muscular labour, although it at first produces increase in volume of the muscle, also gives rise to phenomena of chemical combustion which rapidly modify the structure of the muscular fibril, which in the end loses its contractile properties. In short, to the physiological augmentation of

its muscular elements soon succeed granulo-fatty degeneration and all its consequences of local affections of the heart and general perturbations of the circulation, whence the second indication, which corresponds to this second phase of the disease, to oppose as far as possible this granulo-fatty degeneration of the heart. It is upon these two fundamental data, based alike upon pathological physiology and clinical observation, that the entire therapeutics of mitral diseases rests. It will be readily understood that the means must materially differ in these two periods. In the first period—that which corresponds to compensatory hypertrophy—there should be employed merely hygienic precautions, such as the surveillance of bodily exercise, which should be regularised and moderated, and direction in the choice and exercise of professions, in view of the expenditure of force required. Amongst the avocations which the physician should, as far as possible, interdict to cardiac patients stand in the front rank the military profession, those which expose to cold or damp and which may provoke rheumatism, those which demand great efforts, those in which an impure air, or one charged with noxious principles, is respired, and those which predispose to anæmia, &c.; the regulation of food, which plays so important a *rôle* in the dietetic treatment of cardiac affections, as well as the condition of the digestive organs, abstinence from alcoholic beverages, and the cessation of the use of tobacco, &c. The choice of climate, in which those of excessive temperatures should be excluded, and that of habitations should be objects of the physician's consideration. Besides these hygienic precepts he should take moral hygiene into account: every great emotion, every passionate disturbance, every long-continued contention can only aggravate the condition of such patients.

Medicaments, properly so-called, only play an absolutely secondary *rôle* in the management of compensatory affections. Digitalis ought not to be employed, it is formally contra-indicated, and should be reserved for the uncompensated period or affections. Iron, which has been vaunted as so useful in anæmic affections of the heart, ought also to be proscribed. M. Dujardin Beaumetz greatly prefers quinine, and especially arsenical preparations which, in anæmia, possess the advantages of iron without its inconveniences, and the tonic action of which upon the heart is happily associated with a stimulation of the general functions. Alongside of this remedy Dujardin Beaumetz places the bromide of potassium, whose action is still better indicated in uncompensated mitral affections. It may, however, be of service in this first phase in combatting the pains, sensations of oppression, and the insomnia, in a word, the whole series of nervous phenomena which are so often observed in the early stages of mitral lesions, especially in many nervous women. Baths, which hold a middle place between hygienic and medicinal measures, can only be permitted tepid; hot baths and cold baths, hydrotherapy and sea-bathing, and lastly the use of mineral waters (although it is true they have been recently recommended in special conditions) are also to be proscribed. Such is the *ensemble* of indications and contra-indications, therapeutic and hygienic, formulated by M. Dujardin Beaumetz.—*Gazette des Hôpitaux.*

Tuberculosis of Peyer's Patches.—(Laveran.)

The alterations I have met with in the intestines of tuberculous subjects may be ranged under the four following heads:—

1. Isolated tubercular granulations, non-ulcerated, bearing much resemblance to hypertrophied closed follicles, from which it is difficult to distinguish them by the naked eye.

2. Annular ulcerations—the most frequent and most characteristic.

3. Ulcerations of Peyer's Patches and of the closed follicles.

4. Diffuse tubercular colitis; the large intestine thickened, ulcerated in a large number of points, presents the same aspect as in dysenteric cases, and, during life, symptoms of dysentery are sometimes observed—tenesmus, small, mucous, and sanguinolent stools.

I shall not delay over the annular tubercular ulcerations of the intestine; these are nowadays well known, and all authors agree in regarding them as the most characteristic intestinal lesions of tuberculosis. When you see an intestine affected here and there by these trans-

versal ulcerations, the long axis of which is at right angles to that of the intestine, you may affirm that you have to do with tubercular lesions; the diagnosis may be made at arm's length. The mechanism of the formation of these ulcerations is explained by the development of the tubercles along the course of the vessels of the intestine, which have, as you are aware, a circular (annular) direction; the effects of thrombosis are added to those of the tuberculosis. These annular ulcerations often give rise to strictures of the intestine.

If the tubercular ulcerations of Peyer's patches were always accompanied by annular ulcerations in other parts of the intestine the diagnosis of the nature of ulcerations would be easier; but such is not the case: lesions of Peyer's patches may be general in the absence of any annular ulceration, and you have under such circumstances lesions which present a great analogy with those of typhoid fever. The small intestine, in fact, presents a series of elongated ulcerations, the long axis of which is parallel to that of the intestine, and which are located opposite to the insertion of the mesentery, occupying, in short, Peyer's patches. These ulcerations are generally more numerous and more extensive in proportion as you descend towards the ileocæcal valve; sometimes a dozen may be counted strictly confined to Peyer's patches. In the interval between the chief ulcerations hypertrophied closed follicles, and these frequently ulcerated, are found. The mucous membrane of the large intestine presents a series of small ulcerations which appear to be located in the closed follicles. At first sight it appears almost impossible to differentiate these lesions from those of typhoid fever; nevertheless, an attentive examination of the intestinal ulcerations almost always enables one to recognize their true nature. The differences which exist between tubercular ulcerations of Peyer's patches and typhoid ulcerations may be summed up as follows:—

1. Tuberculosis of Peyer's patches is not accompanied by a tumefaction *en masse* of these patches, as in typhoid fever; there is, moreover, no typhic material on the surface of the ulcers; the ulceration occurs *in separate points*, and, in the intervals between the little ulcerations, patches of Peyer sometimes preserve an almost normal appearance.

2. On inverting the intestine again and examining the peritoneal surface corresponding to the ulcerations, small tubercular granulations are often seen, which, it is unnecessary to say, are wanting in typhoid fever; sometimes, even, islets of granulations are detached from the white tracts of tubercular lymphangitis.

3. As a last resort in this differential diagnosis, there remains the histological examination, which, in those cases in which the ulcerations depend upon tuberculosis, reveals the existence of the typical granulations. For this examination fragments of intestine are hardened by the ordinary methods, and sections made. It is often necessary to examine a considerable number of sections before discovering well characterized granulations: these granulations are not seated in the superficies of the ulcers, but in the cellular tissue or even the serous membrane. To sum up, from an anatomical point of view, I believe that it is necessary to admit a variety of intestinal tuberculosis located in Peyer's patches, one which presents a great analogy with the characteristic lesions of typhoid fever.—*L'Union Médicale.*

Book Notices.

On Gastro-Elytrotomy. By Henry J. Garrigues, M.D. New York: D. Appleton & Co.

Annual Report of the Pennsylvania Free Dispensary for Skin Diseases, No. 920 Walnut Street, Philadelphia, U.S.

Fifty Years Ago. An Address to the Graduating Class of the Medical College of the Pacific for 1878. By Henry Gibbons, Sen., M.D.

The Index Medicus, a monthly classified record of the current medical literature of the world, compiled under the supervision of Dr. John S. Billings and Dr. Robert Fletcher, is announced to appear in January, 1879, F. Leypoldt, 37 Park Row, N.Y., Publisher. This will be a useful journal for reference.

Prescription and Case Record. By Joel A. Miner, M.D., Ann Arbor, Michigan. Price 75 cents.

This is a very useful pocket prescription book. By using a carbon paper a copy of every prescription is recorded without the trouble of writing it twice.

Miscellaneous.

We regret to have to announce the death, at the age of 17, of Mr. R. A. Lavell, son of Dr. Lavell, of Kingston.

Dr. Yates, of Kingston, has returned from Bermuda. We are glad to hear that his health has greatly improved.

The death of Ciniselli, of Cremona, who was the first to demonstrate the possible applications of electrolysis in surgery, is announced.

Appointments.—Dr. W. Forrest has been appointed head-master of the Bradford High School.

Pruritus Vulvæ.—Dr. E. B. Stevens, in the *Obstetric Gazette* for October, recommends the application of sulphurous acid, full strength, in cases of pruritus vulvæ.

Remedy for Poison Ivy.—A saturated solution of chlorate of potash applied locally to the affected parts is sure to cure or greatly improve, within twenty-four hours, the worst of cases.

For Lichen Urticatus.—Milk of sulphur, 2 oz.; hyposulphite of soda, 1 oz.; dilute sulphuric acid, ½ oz.; gelatine or patent size, 2lbs., to be well mixed with a pint of warm water and added to a tepid bath, in which the patient should remain an hour twice weekly.

Thumb-Sucking and Irregular Teeth.—Dr. Chandler states that there is no cause so productive of malformation of the bones of the mouth and irregularity of the teeth, as the habit of thumb-sucking during infancy, the different positions of the thumb giving rise to different kinds of deformity.

New Medical Journals.—The *Southern Clinic*, a Monthly Journal of Medicine, Surgery, and New Remedies. Published in Richmond, Va. C. A. Bryce, M.D., and J. R. Wheat, M.D., Editors and Proprietors. Terms, $1.50 per annum. *National Medical Review.* Published at Washington, U. S. Walter S. Wells, M.D. Editor. *The Southern Practitioner.* Published at Nashville, Tennessee, monthly. Subscription $1.00 yearly.

Maltine.—At a late meeting of the British Medical Association, at Bath, in August last, among the exhibits of pharmaceutical and medical preparations, much interest was shown in one called *Maltine*, which may be described as a highly concentrated extract of *malted barley, wheat and oats.* Extracts of malt (*i. e.*, malted barley) are pretty widely known, but this is the first example of a combination of the nutritious principles of these three cereals that we have seen; and the greater value of this combination is apparent, as wheat and oats are especially rich in muscular and fat-producing elements. This preparation is entirely free from the products of fermentation, such as alcohol and carbonic acid, and is very agreeable to the taste. Clinical experience enables us to recommend it as a nutritive and digestive agent, in virtue of its albuminoid contents, and its richness in phosphates and in distaste, likely to prove an important remedy in pulmonary affections, debility, many forms of indigestion, imperfect nutrition, and deficient lactation. It will, in many places, take the place of cod-liver oil and pancreatic emulsions, where these are not accepted by the stomach. The manufacturers, Messrs. Reed & Carnrick, issue a pamphlet describing fully the process of manufacture, which no doubt they will supply to any medical man; and we are disposed to believe that maltine, which is less known here than abroad, is well worthy of practical attention.—*British Medical Journal.*

Births, Marriages, and Deaths.

DEATH.

At Berlin, on January 4th, John Philip Jackson, M.B., aged 36 years.

TWO fourth year Students are open for engagements, as assistants to a medical practitioner, during the summer vacation from May to October, 1879.

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TORONTO, MARCH, 1879.

Selections: Medicine.

DISEASES OF THE BRONCHIAL GLANDS.

BY RICHARD QUAIN, M.D., F.R.S.,
Consulting Physician to the Hospital for Diseases of the Chest at Brompton; etc.

The study of the diseases of those lymphatic glands which are situated at the bifurcation of the trachea is of great interest and importance, not only in reference to the diseased glands themselves, but also by reason of the manner in which they, on the one hand, simulate, and, on the other hand, modify and mask the diseases of other organs in the neighbourhood. Throughout English and foreign medical literature numerous cases will be found described, in which there existed marked disease of the bronchial glands. Little notice, however, has been taken of less striking, but far more numerous, examples of disease. And it is only within a comparatively recent time that the condition has received special attention and been discussed as a disease *per se*. MM. Rilliet and Barthez, in their well-known *Traité des Maladies des Enfants*, have described the disease in infants; and Dr. West, in his work on *The Diseases of Infancy and Childhood*, has fully and clearly described—under the head of "Bronchial Phthisis"—the tubercular diseases of these glands in young subjects. It is, however, to M. Noel Guéneau de Mussy, following up and widely extending the investigations of his predecessors, that we are specially indebted for our knowledge of the effects of these lesions, and to his pupil, M. Baréty, who has published an exhaustive memoir upon them, under the title *L'Adénopathie Trachéo-Bronchique*. The subject has attracted my notice since, or even before, the year 1853, and I have kept short notes of nearly sixty cases which I have seen in private practice and which will form the basis of some of the conclusions to be here stated.

Before, however, describing the pathological and clinical history of the diseases of the bronchial glands, it will be well to make a short reference to their anatomical relations. Taking the bifurcation of the trachea as a starting point, we find in the space between the right and left bronchus a group of glands. They are from ten to fifteen in number, and they vary in size from that of a small pea to that of an almond. The glands towards the right bronchus are larger than those towards the left. Glands are also situated upon the tubes; they are few in number and small. The vascular supply of the glands, which is free, is derived from the bronchial arteries, and the blood is returned to the bronchial veins. Afferent lymphatics reach these glands from the lungs, from the pleura, from the neck, and other neighbouring parts. Besides these groups of comparatively large glands, numerous minute lymphatic glands are found in connection with the primary division of the bronchi, chiefly at the back of these tubes, at their bifurcations and those of the pulmonary artery. The central group of glands is in relation in front with the pericardium, the arch of the aorta, and the pulmonary artery; behind, with the pulmonary plexus of nerves, the œsophagus, the aorta, the vena azygos, etc. The glands on the upper, the anterior, and posterior surfaces of the right bronchus are four or five in number, and smaller than those of the central group. Their situation brings them into relation with the arch of the aorta, with the

innominate and subclavian arteries, with the brachio-cephalic vein, and with the vena azygos, the pneumogastric nerve, and its recurrent branch. The glands on the left bronchus are still smaller than those of the right side. Their position gives them relations with the arch of the aorta, the origin of the left carotid and subclavian arteries, the left branch of the pulmonary arteries with the large veins, with the left pneumogastric nerve, and especially with its recurrent branch. Lastly, it should be stated, as a guide in clinical examination, that the bifurcation of the trachea takes place in front of the body of the fifth dorsal vertebra, or between the fourth and fifth, and behind the lower end of the first bone of the sternum. The glands, except when diseased, are proportionately larger in children than in adult or aged persons.

The bronchial glands participate in the pathological conditions which affect lymphatic glands generally. In the present instance, however, those cases will not be noticed in which the bronchial glands, becoming the seat of constitutional disease in association with other glands in the neighbourhood, constitute large and manifest tumours. Nor is it intended to give prominent consideration to the state of the glands when they enlarge in acute disease—such as eruptive fevers; nor in those diseases—such as typhoid—where the glands play a secondary part. The writer has been anxious to describe and to aid in recognising the presence of a condition in which the disease of the bronchial glands constitutes to some extent a disease *per se*, or gives rise to complications which it is important to recognise. The remaining morbid changes to which the bronchial glands are liable may be grouped as follows.

a. The bronchial glands are liable to congestion with enlargement, as are glands in other situations. Hypertrophy may be the result, if the latter condition become chronic. After childhood, the glands in this situation become almost invariably studded with black deposits, the quantity of which may be so considerable as to constitute melanoma.

b. These glands are liable to acute and chronic inflammation. Acute inflammation in this situation, terminating in abscess, is rare, but several cases of the kind have been recorded. Chronic inflammation of the glands is by no means uncommon. It may lead to permanent enlargement, or to contraction and induration of the glandular textures, with the presence of calcareous particles, or to abscess. The contents of the abscess may be more or less completely absorbed, leaving a partially filled sac or cyst, containing thick pus or cheesy matter. But these glands, when inflamed and enlarged, may form adhesions with surrounding parts, and the contents of an abscess, if it exist, may be discharged by an ulcerative process into the substance of a lung, into the mediastinum, into the trachea, or œsophagus, or even into a blood-vessel. Diffused emphysema has been found in such cases, and the emptied sac has assumed in some instances the character of a cavity connected with the lungs. When the matter is discharged into the air-passages, purulent expectoration is the result. Two or three examples of such cases were noticed in the writer's observation, and the possibility of their being mistaken for the discharge from a cavity in the lungs, or an empyema, was remarked upon at the time. The abscess may discharge into the mediastinum. A remarkable instance of the kind is recorded in the case of the late much lamented Dr. Fuller. A chronic abscess of the bronchial gland had opened into the posterior mediastinum. This led to pyæmia, the formation of abscesses in the brain, and to the loss of a valuable life.

c. These glands are liable to suffer especially from tuberculous or scrofulous disease; from various forms of malignant disease; and in cases of secondary or tertiary syphilis. Of the latter form of disease, some striking examples have fallen under the notice of the writer, in which symptoms closely resembling phthisis existed, but which yielded to treatment directed to the specific disease.

With regard to the ætiology of the diseases of the bronchial glands, it will be sufficient merely to allude, amongst predisposing causes, to hereditary predisposition, to general impairment of health, and the like. MM. Rilliez and Barthez have described the frequency of the disease in childhood. My own observations made on young persons and adults, show that in

fifty-nine cases, twenty-one were males and thirty-six females (in one case the sex was not recorded). Of these, two were under 10 years of age, nine were between 10 and 20 years of age, eighteen were between 20 and 30, and twenty-six were over 30 years of age; while in three cases the age was not stated. If these observations justify any inference, it is that females are more liable to disease of the bronchial glands than males, and that the disease occurs with increasing frequency after the age of puberty. Amongst the exciting causes of disease in these glands, I need not do more than mention those general conditions which give rise to disease in glands generally, such as scrofula, tubercle, malignant disease, etc., and will pass on to the consideration of the more immediate local exciting causes. Cold leads frequently to congestion and enlargement of the bronchial glands. But it is to local irritation or inflammatory disease in organs or tissues with which these glands have a connection, that the source of disease may be frequently traced. As we find the submaxillary or cervical lymphatic glands enlarged from irritation or disease in the mouth or throat, or the axillary glands or the inguinal glands enlarged from irritation or inflammation about the hands and feet, so we may find the bronchial glands enlarged temporarily or permanently from inflammatory disease in parts whose lymphatics pass to these glands. They have been observed to be enlarged in the course of or after certain acute specific diseases, such as scarlet fever, measles, and typhoid fever. In whooping-cough, this enlargement has been so frequently observed by M. Guéneau de Mussy, that he believes this disease to be an exanthem of the bronchial mucous membrane, and that this local disease leads to enlargement of the glands, which, again, by pressure on the pneumogastric and recurrent nerves, gives rise to some of the special phenomena of the disease, such as crowing cough, and even to the vomiting frequently observed in this disease. It is right to remark here that the late Dr. Hugh Ley speaks interrogatively, in his work on *Laryngismus Stridulus*, of enlarged bronchial glands being capable of producing a cough like whooping-cough; and he further alludes to some cases of whooping-cough in which the glands by the side of the trachea were enlarged. He asks, "May it not be that an enlargement of these glands from a specific animal poison, similar to that of the parotid gland in mumps, is after all the cause of whooping-cough?" The same author gives several beautiful illustrations of diseased bronchial glands pressing upon the pneumogastric and other nerves. The black deposit so often found in the glands is the result of its absorption from the lungs.

The symptoms which I have observed as more or less characteristic of the presence of enlargement of the bronchial glands are the following.

1. Cough is noted as being a prominent symptom in thirty-nine cases. In twenty-one of these cases, it was stated to have been the most troublesome of the symptoms present. In six cases, it was described as harsh and laryngeal; in four cases, spasmodic, resembling whooping-cough. In the other cases, five in number, it was characterised as short and hacking, constant, incessant; and in one case, the sound resembled that made by the cough of a sheep.

2. Pain is, in regard to the frequency of its occurrence, the next symptom recorded. It was mentioned as being present in twenty-two of the cases observed by the writer. The seat of pain was almost constantly referred to the situation of the fourth and fifth dorsal vertebræ at one or both sides of the spinal column. The pain was mentioned in a few cases as existing only in front, beneath and at one or both sides of the upper end of the sternum and below the clavicles. The feeling was described in some cases (five) as of distressing tightness, and in one case as a "spasm." Tenderness on pressure over the seat of pain was very frequently observed. The persistence of the pain was very varied.

3. Difficulty of breathing was a noticeable symptom in several cases. In thirteen, it was recorded as being specially so; in four, it had all the character of spasmodic asthma, occurring at intervals and especially during the night.

4. Difficulty of swallowing was noticed in ten cases; in one of these the difficulty was remarked especially in swallowing liquids.

5. Hæmoptysis was present in ten cases. The amount of blood varied in these cases from marked streaks to copious expectoration, lasting two or three days. No case was recorded as presenting this symptom, except on tolerably clear proof that it depended on bronchial gland enlargement, and on no other cause.

6. Congestion and puffiness of the face were noticed as present in three cases.

7. The expectoration of mucus, such as results from bronchial catarrh, was frequently present. Expectoration of pus was present in three cases. In each it resembled the contents of an ordinary glandular abscess mixed with air. In one of these, the discharge was intermittent. The frequent occurrence of cough, without any expectoration, was remarked in many cases. Calcareous particles are mentioned also as having been expectorated.

8. Loss of voice (four cases) and hoarseness (two cases) are recorded as striking symptoms.

9. Vomiting is mentioned as having been present twice.

10. Lastly, the position assumed with least discomfort by the patient when lying down was noticed in forty-one cases. Of these, twenty-three rested on that side on which the glands were mentioned as being chiefly if not wholly affected. In fifteen cases an opposite condition was noticed. In two cases, lying on the back was the most comfortable position. One patient unable to lie down, sat when in bed, and stooped forward. One patient, a little boy, could only rest on his face, elbows, and knees. This case was further remarkable in reference to the clearness with which the disease was recognised and the successful result of subsequent treatment.

It might be mentioned here incidentally that the glands of the right side were noticed as being chiefly affected in twenty-eight cases, and those of the left in twenty-two cases; in four, both sides seemed equally affected, and in four no record was made.

The general or constitutional symptoms connected with the malady under notice are in no-wise peculiar. The symptoms described above have special reference to these glands. The cough and its peculiar characteristics are, no doubt, in a great measure dependent on pressure or on irritation communicated to the pneumogastric nerves and their branches. So likewise pain and difficulty of breathing, in a great degree, through direct pressure on the air-passages, may also cause or aggravate this symptom. Aphonia especially appears to have relation to the condition of the recurrent nerves. In one of the cases which the writer saw with Mr. Lennox Browne, paralysis of the left chorda vocalis existed. The diagnosis of glandular disease was clear, a conclusion confirmed by the results of treatment. Vomiting is mentioned in two cases. M. Guéneau de Mussy says this result is more frequent when the left pneumogastric nerve is pressed upon. He sees a connection between the troublesome vomiting which occurs in some cases of tubercular disease of the lungs with like pressure on nerves. The puffiness of the face and eyes noticed in these cases is due to the pressure on the venous trunks, a condition which also accounts, not only for hæmoptysis, but for bleeding from the nose, occasionally present. Copious and sometimes persistent hæmoptysis has been traced to the perforation of a vessel (ulceration in connection with disease of the glands).

Physical examination is of great importance in confirming the diagnosis that may be suggested by the presence of the symptoms just described. The following were the physical signs elicited in the fifty-nine cases referred to.

1. Dulness was present in forty-seven cases. It was found between the margin of the scapula and the spinal column at one or both sides, on a level with the fourth and fifth dorsal vertebra. It varied in degree, was more readily manifested when the muscles of the back were made tense by folding the arms across the chest, and was often strikingly distinct when one side was contrasted with the other. Dulness was present in front in eight cases (whether coincidentally with dulness at the back or not is not clearly stated), beneath the top of the sternum and at each side below the sterno-clavicular junction. The dulness here was best elicited by the patient holding the head backwards whilst percussion was being made.

2. Flattening of the affected side in front was mentioned in three cases. Diminished mo-

bility of the affected side, independently of flattening, was recorded in four cases. Prominence in front was not recorded in any case, though, no doubt, it may occur.

3. The respiratory sounds were variously modified. Marked tubular breathing was recorded as being present over the seat of disease in fourteen cases. In ten, the expiratory murmur was described as being very loud, various modifications of the inspiratory murmur being found at the same time. Feebleness of the respiratory murmur as a whole was noticed in fourteen cases. In some this deficiency extended over the whole lung; in others it existed over the upper or lower portion of a lung, behind or in front. The observations made on the voice by the writer were few, but M. Guéneau de Mussy and M. Lereboullet speak of a peculiar and increased reverberation of both the voice and the cough. Dr. Eustace Smith has described a venous hum heard at the root of the neck when the head is thrown back, caused by the pressure of the enlarged glands on the venous trunks in children.

The symptoms and signs above described will generally suffice for the diagnosis of diseases of the bronchial glands. It is, of course, necessary always to remember that, in the present and all similar instances, means have to be taken for excluding diseases which may produce like phenomena. Thus we may find cough, pain, tenderness on pressure, and aphonia, in a case of hysteria, without any evident structural disease. On the other hand, a small tumour, say a small aneurism, may produce all the signs of pressure which are above given as the signs of bronchial gland enlargement. It is the duty of the physician to recognise these differences and distinctions by tracing the effects to their sources.

The prognosis will in this, as in similar instances, so entirely depend on the nature of the disease, on its amount and its condition, on its relation to and effects on surrounding organs and textures, that each case must be regarded independently. It would be impossible to discuss them fully here—all that can be said is that simple enlargements generally yield to treatment, and within a reasonable period.

In several cases of bronchial gland enlargement, treament has proved very effective. Such cases would seem to be those of simple chronic enlargement. Many such have yielded to the use of iodide of iron in the form of pills or syrup, and to the external application of a solution of iodine, composed of equal parts of the tincture and the liniment of iodine, between the shoulders. The same treatment has likewise proved very effective in cases in which a syphilitic origin for the disease could be traced. Symptoms such as cough, difficulty of breathing, pain as well as dyspnœa, loss of flesh, strength, etc., will all require more or less suitable treatment. The cough and difficulty of breathing may in some cases be relieved by simple expectorants or antispasmodics. A useful application, when pain is a prominent symptom, is an embrocation composed of equal parts of chloroform, belladonna liniment, laudanum, and spirits of camphor. A couple of drachms of this composition sprinkled on the surface of piline, and applied on the painful part for a few minutes, often affords relief. Hypodermic injection of morphia may be required when pain is very severe. Under all circumstances, it is necessary to improve the general health by wholesome diet, pure air, and those other conditions which promote good digestion and elimination from the excreting organs.—*British Medical Journal.*

Chloral in Retention of Urine.—Dr. Tidd relates a case of twenty-four hours' retention of urine in a young woman in the eighth month of pregnancy. On account of tumefaction of the genital organs and some deviation of the urethra, all attempts at catheterism had failed; morphia was administered and puncture of the bladder proposed, when Dr. Tidd remembered the success which had attended the administration of chloral in like cases in the hands of some surgeons. He prescribed a solution of 10 grammes (150 grains) of chloral in 60 grammes (℥ij) of water, and administered it in teaspoonful doses at first every half-hour, and then every two hours. Deep sleep ensued, in which the patient unconsciously passed an enormous quantity of urine. Excretion commenced five minutes after the second dose of the solution. Seven days later natural labour occurred; child living and healthy; no recurrence of retention.—*Le Practicien.—Archives Méd. Bely. Gaz. Hebd.*

TRACHEOTOMY IN MEMBRANOUS LARYNGITIS.

[Read before the Royal Medical and Chirurgical Society.]

BY ROBERT WILLIAM PARKER.

A paper was read on tracheotomy in membranous laryngitis, the indications for its adoption, and some special points as regards its after-treatment, by Mr. Robert William Parker. The author began by expressing his regret that the surgeon is only too often called in after all therapeutic measures have failed, the more so, because these measures generally include the use of depressants, which if not at once beneficial greatly tend by their continued administration to increase the prostration, so often a predominant feature of the disease. He regards recession of the chest-wall as a more important indication for tracheotomy than a loud clanging cough, for in the most urgent cases voice and cough are all but abolished owing to implication of the vocal cords. He advocates the administration of chloroform previous to the operation, and has never seen any ill effects therefrom. The higher operation is preferred as the more easy, especially in children, and the use of a tracheal dilator is advocated in preference to the immediate introduction of the cannula; in this manner the tracheal wound is kept open. Then the author advises, *as a matter of routine in every case*, that the trachea and glottis be thoroughly cleared of all foreign matters, whether membrane or mucus, before the introduction of the tube. For this purpose a feather is usually employed, but any other means may be adopted which the operator may prefer. The feather may be passed downwards towards the trachea and upwards into the larynx, and through the glottis. The presence, it was argued, of membrane or inspissated mucus in the larnyx above the tube after tracheotomy, is often an unsuspected cause of reflex irritation and cough; the surgeon, therefore, ought every now and then to clear out the larynx, so long as the patient is unable to do this for himself; and while he has to wear the cannula in his trachea the patient is unable to use the natural means —viz., coughing—owing to the fact that a.l air is directed from the larnyx through the tube. The author advocates the use of the largest-sized tube which can be got into the trachea without the employment of actual violence, and of the shortest that is consistent with safety, and he lays stress on the advantages of the tracheal part of the tube being freely movable. As regards the curve of the tube, it was stated that the outline should approximate to the Gothic rather than to the Roman arch; in other words, tubes made in the form of quarter circles (the usual forms are not recommended, for it can be shown that such tubes must almost necessarily impinge on the anterior wall of the trachea, and so produce mischief). He believes that a large proportion of the troubles which in past years have arisen from the use of "rigid" tubes has been caused by "ill-fitting" tubes. Speaking of Mr. Baker's "flexible tubes," the author is rather inclined to doubt the expediency of regarding "flexible" tubes as less likely to produce ulceration than "rigid" ones; for, unless the flexible tubes are made of a suitable curve, they will most probably lead to ulceration, just as certainly as (though, perhaps, less rapidly than) rigid tubes. The great indication for operation having been the presence of a mechanical impediment to respiration, so the chief object of the surgeon in the after-treatment must be to prevent its recurrence. The use of a feather has already been referred to. Another important aid is the employment of steam; the amount varies with the individual case, but an excess in all cases is to be avoided.* The less there is of tracheal secretion the more is steam needed, and the converse. Creasote, carbolic acid, benzoin, and other medicaments may be added in order to meet the requirements of various cases. The use of "solvents" is strongly recommended, the most important of these being soda. It may be used in solution (from ten to twenty grains in an ounce of water), and ought to be sprayed into the throat from time to time. It is thought to soften the membrane and to help its removal, and also to render its re-formation less possible. The

* The most useful apparatus for this purpose is the ventilating croup-kettle manufactured by Messrs. Allen & Son, of Marylebone-lane. It supplies not only steam, but fresh and warmed air at the same time.

author has seldom seen cases in which a fatal result could be traced to the operation itself; pneumonia and collapse being the commonest causes of death. The paper concludes thus: Bearing in mind that the operation is undertaken, not as a curative measure, but simply with a view to relieve a mechanical impediment to respiration; seeing, nevertheless, the great frequency with which, after tracheotomy, the trachea and larnyx, on the post-mortem table, are found covered, not to say choked up, with membranous exudation (specimens of which may be found in almost every anatomical museum),—the author, as a practical outcome of his paper, and with a view to raise a definite issue for discussion, feels justified in enunciating the following dictum: The presence of membrane in the trachea, in a fatal case of membranous laryngitis after tracheotomy, must be regarded as evidence of the want of due care on the part of the surgeon in charge, just as much as would the presence of a piece of gut in the inguinal canal after herniotomy, or a calculus in the bladder after the operation of lithotomy.

The President wished to add a few remarks, because the greater part of Mr. Parker's experience had been gained in the Hospital for Sick Children during the time when he (Dr. West) had the happiness of being connected with that institution. He believed he had seen more tracheotomy operations than most surgeons, but he had stood by as a critic, and had probably, therefore, observed points which escaped the individual operator. In the whole course of his practice he never regretted having tracheotomy done; he had often regretted that it had not been sooner performed. Retraction of the soft parts during inspiration was the most trustworthy indication for its performance, and in every case he was accustomed to expose the abdomen and chest, and, according to the degree of this retraction, to draw conclusions as to the expediency or not of having tracheotomy done. Mr. Parker's suggestions as to the operation were sound and wise, and he could bear out what he said about venous bleeding. Then as to the size of the tube; he had seen evil result from the use of too small tubes; and he recollected hearing Trousseau in one of his clinical lectures illustrate this by instancing the difficulty of inhaling through a small tube as compared with one of larger calibre. He was struck to find that Mr. Parker had not mentioned how Trousseau was accustomed to swab out the trachea, holding it to be of considerable importance; and he also advocated dropping in solutions of carbonate of soda, and even nitrate of silver. He had seen what Mr. Parker described, a cannula push aside false membrane in its introduction, showing the importance of clearing the trachea before the tube was introduced. He believed the tube with a movable collar was the invention of M. Roger, late physician to the Hôpital des Enfants Malades. Then he was sure that the chances of success in treatment were small without the aid of an exceedingly competent nurse. He could confirm the statement of the grave indication of a dry state of tube, and in any case where the inner tube is dry he advised moistening with water or solution of carbonate of soda. He doubted if tracheotomy was to blame for the pneumonia which so often complicated membranous laryngitis. — *London Lancet.*

Bullous Scarlet Fever.—An interesting case of bullous scarlet fever is narrated by Bramwell, The patient a week before admittance, having previously been exposed to scarlet fever, complained of headache, sore throat and aching in the bones. When examined at the hospital several spots which presented the characters of pemphigus were found on the skin. In some places the vesicles were broken and an ulcerating surface presented itself. On the left hand and arm there was considerable loose epidermis, and on both legs there were many small ecchymoses. On the nates a number of red angry-looking spots presented themselves, some being covered with scabs, these latter were chiefly situated in the fold between the nates and around the anus. The tongue was perfectly clean, moist, and abnormally red. The throat was considerably inflamed and there was an ash coloured slough on the uvula and back of the pharynx. The temperature was 99.8° Fahr.; the pulse 68. The temperature never exceeded 101.3° Fahr., nor the pulse 90. A mixture of iron and quinine was prescribed, and the throat was brushed over with a solution nitrate of of silver.—*Medical Times and Gazette.*

DIARRHŒA IN CHILDREN.

Diarrhœa is essentially a clinical disease. Pathology shows no lesion sufficient to account for the gravity of the symptoms. For the purposes of prognosis, the appearance of the stools may be classed as—(*a*) Homogeneous in character and consistency—prognosis good; (*b*) Heterogeneous—semi-solid, lumps of undigested aliment coated with mucus and tinged with bile—prognosis not so favourable; (*c*) Heterogeneous—mucoid, watery and abundant—prognosis less favourable; (*d*) Heterogeneous—mucoid, very watery; copious gushes of fluid, preceded by pain or convulsions—prognosis bad. The appearance of blood in the stools may or may not be of serious moment.

For clinical purposes, diarrhœa may be divided into three periods, according to the age of the patient.

1. Indentitional, six months and under.

2. Dentitional, from six to twenty-four months.

3. Post-dentitional, from two to twelve years.

In the indentitional period, the most frequent cause is improper feeding. In this relation Dr. Sansom gives some rules how to bring up a child: 1st. Keep it warm, clean, and give it plenty of fresh air. 2nd. Feed it with its mother's milk, or, if that is insufficient, give diluted cow's milk or Swiss condensed. Begin to wean at seven months old. 3rd. To bring up by hand, give it at first cow's milk and water, equal parts, or Swiss condensed milk, two teaspoonfuls to a bottle of warm water, increasing the proportion of milk as the child grows older, keeping the feeding-bottles and tubes perfectly clean. 4th. Feed regularly every two hours during the day; after six weeks old, every three hours,—not so often at night. 5th. As the child grows older, supplement the milk by milk thickened with well-baked bread, or some of the made farinaceous foods, once or twice in the day; and at one year give one meal a day of broth or beef tea. 6th. Prevent its taking improper food, stimulants, and medicines without medical advice.

Diarrhœa from this cause may be cured by having resort to a proper diet. Do not take the child away from the mother's breast until the very last. Rather improve her secretion. He recommends very highly the plan of making the mother take, a short time before nursing, a half-pint of milk, which will cause a secretion of healthy milk.

Other frequent causes are dyscrasia, as rickets, and especially congenital syphilis; direct and reflex irritation of the central nervous system, such as blows on the head, falls, herniæ, exposure to the sun and heat; also the onset of acute febrile diseases.

The treatment consists in a return to a proper dietary. A preliminary aperient of rhubarb, magnesia, castor oil, or calomel is good if there has not been too much water withdrawn from the blood by the flux. The vegetable astringents combined with bismuth or chalk; sedatives, as bromide of potassium in one or two-grain doses, are very serviceable; chloral, one grain, with or without the bromide, when there is much wakefulness and irritability; opium disagrees by interfering with the processes of nutrition; starch enemata are very serviceable. In the most chronic cases we must have resort to artificial nutriment, as cod-liver oil or the raw meat plan.

The dentitional period is conveniently subdivided into the *incisor*, from six to nine months, in which occurred 7·6 per cent. of cases; chief *molar*, from nine to fifteen months, with 58·2 per cent.; *canine*, from fifteen to twenty-one months, 28·1 per cent.; *posterior molar*, from twenty-one to twenty-four months, 5 per cent.

The chief cause is here the disturbances arising from the eruption of the teeth; other causes are as before, though not so frequent, and worms. The medicinal treatment is about as before. The irritation of the gums may be relieved by friction over the gums with the finger moistened with honey or glycerine. Incision is not called for except in rare cases.

The post-dentitional period. Intestinal worms are the most frequent cause in this period, principally the thread worm (oxyuris vermicularis) and the round worm (ascaris lumbricoides). These are a frequent cause of blood in the stools and of prolapse of the rectum. The natural effort of the bowel will, at times, be sufficient to expel them. Santonine is a specific for the round worm. We have none

for the thread. Improper diet, rickets, and syphilis are also causes, but less frequently in this period. After worms, the next most frequent cause is *zymotic disease*. The question is briefly discussed whether, other than typhoid, there is a specific contagium inducing diarrhœa. Dr. William Johnston, of Leicester, made a series of observations, and discovered numerous bacteria in the excreta of infants suffering from diarrhœa; in the air, from sewer emanations; and in the juice of over ripe fruits in the summer months. He failed, or found only few of them in the winter months, and in the excreta of healthy infants. Hence, he concludes that in Leicester, in the summer months, diarrhœa is caused by these bacteria, which are inhaled with the air or swallowed with the food, giving rise to putrefactive changes in the bowel correlative to the development and multiplication of these microscopical organisms.

Dr. Sansom does not entirely agree with these conclusions. He says that bacteria have been found in health in all parts of the gastro-intestinal tract; and even if they were greatly increased in number during the diarrhœa, a causal relation was unproven, for in all conditions of mucous catarrh, a suitable nidus is provided for the propagation of low organisms. That the *air may* be a cause, he admits; but considers contaminated water to be a much more frequent cause. He thinks that, excluding cholera and typhoid, there is no specific contagium giving rise to diarrhœa. The diarrhœa produced by these germs is a putrefactive diarrhœa, and strictly analogous to that caused by the ingestion of food in a state of decomposition. This septic diarrhœa has in most cases a high temperature, and yields generally to antiseptic treatment, especially with the sulphite of soda.—(*Dr. A. Ernest Sansom in the Obstetrical Journal.*)

Convulsions of Young Children.—Dr. Engel (*Phil. Med. Times*) recommends that when the usual remedies—hot bath, chloral, bromide, etc.,—have failed, resort be had to hypodermic injection of morphia and inhalation of nitrite of amyl. He reports several successes and no failures.

ACHING KIDNEY.

BY J. MATTHEWS DUNCAN, M.D., LL.D.

This disease is sometimes, both in men and women, very easily recognized. There are achings in cases of what is called floating kidney. The patient can put her hand on the lump, and say, "Here is the pain," and there is no difficulty in recognizing the disease. But there are some cases in which the disease is very difficult to identify. In pregnancy, for instance, right or left hypochondriac pain is very frequent. In many cases I have been able to be quite sure, from the history before and after pregcancy, that the disease was not to be classified in the vague way that is implied in giving it the name of hypochondriac pain, but that it was really a case of aching kidney. In pregnancy you have the very opposite conditions to those in floating kidney. If pregnancy is advanced, you cannot get at the kidney to feel it and identify its position. Here I may remark that, while the disease often occurs in pregnancy, yet some women who are liable to it do not suffer while in that condition.

The disease in women is not a rare one, and its characters are the following: One or other kidney is the seat of pain. It is not a neuralgic pain; it is a heavy, wearing pain deep in the side. It is in the region of the kidney; and in many cases, as I shall presently tell you, you can easily identify it as being in the kidney itself. It is not generally that kidney-pain which is a familiar symptom of calculus. In such cases the pain is the pain of the pelvis of the kidney. You have in the region of the small ribs a boring or a nail-like pain. Patients with aching kidney generally point to the hypochondriac region, not to the back, as they often do in cases of calculus in the kidney. This pain is frequently accompanied by pain in the corresponding lower limb, referred most frequently to the course of the sciatic nerve, sometimes to the course of the anterior crural. The pain is often accompanied (and you will find this of importance throughout all the subjects of this lecture) by irritability—I do not say disease—of the bladder; and it is frequently accompanied by pain in the region of the ureter corresponding to the kidney affected. This pain is not rarely present only

during the monthly periods. When it is present only during the monthly periods it may be classed with that disease, which is very ill defined, called dysmenorrhea. It should never be placed there unless you wish to use the word dysmenorrhea in a very wide sense. If we use the word as including aching kidney, we might as well use it as including headache —a use which would be in accordance with what is extensively done by writers. This disease, however, often eludes the examination of the physician, because it occurs in many cases only during the monthly periods. In all cases it is then aggravated. I do not think I have ever seen a case in which the patient did not volunteer the statement that the pain was worse at the monthly time.

It is not usual to find both kidneys aching; and I guess—I can use no stronger word—that the left kidney is much more frequently the seat of disease than the right one. You are not left in your diagnosis in all cases merely to identification of the seat of the pain, although that may be sufficient. Frequently in the region of the pain you can find distinct fulness; that is a very important condition that I have not time to explain to you. It can scarcely be made out in a fat woman; but in many cases this condition of fulness over the affected kidney is easily recognized. In addition, swelling of the kidney or of the suet, or of both, is not rarely to be made out. The physical examination of the kidney is too much neglected. It is not in floating kidney only that you can feel the organ. In many women who are not nervous, yielding themselves freely to examination, and who are not fat, you can feel the kidney with distinctness; and in cases of this kind you can frequently make out, as I have said, that there is a swelling of the kidney or of the suet, or of both. There is also generally tenderness, sometimes great tenderness.

The treatment is to be conducted on the general principles applicable to the therapeutics of neuralgia or slight hyperæmia; and these two conditions are not so very remote from one another as may at first sight appear. A neuralgia sounds as if it were something quite different from a hyperæmic condition; but that has to be proved. The remedies I have found of most service in simple cases of this kind are tonic regimen and tonic medicines, especially iron in the form of the tincture of the perchloride combined with mild diuretics in small quantity, and especially the common sweet spirits of nitre.—*Louisville Med. News.*

PARALYSIS FOLLOWING DIPHTHERIA.

BY N. S. DAVIS, A.M., M.D., LL.D.

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In studying the nature of the paralysis itself, you must remember that impairment and loss of muscular power in any particular muscle or set of muscles may be caused by either of the following morbid conditions: 1st. Disease in the central part of the nervous system involving the origin of the nerves supplying the paralyzed part. 2nd. Disease of some part of the nervous cord between the centre from which it emanates and its peripheral distribution. 3rd. Disease of the peripheral extremity of the nerves in the paralyzed part. And 4th. Loss of the susceptibility, or what Haller called *irritability*, in the muscular structure itself. The condition last named is deserving of more attention than it has received from most of those who have given special attention to the study of paralytic affections.

The members of our profession have come to look so directly to the nervous structures for explanation of all changes in sensibility and motor power, that the existence of a property or susceptibility inherent in muscular or any other structures, by which it is capable of being impressed or acted on by exterior influence has been apparently overlooked. Yet no physiological fact is more easily demonstrated than that such a property exists, not only in the atoms constituting muscular, but also those of all other living structures. Indeed without such a susceptibility in the muscular structures, no amount of nerve-force or intensity of electric currents would elicit the slightest muscular action or motion. This property can be impaired or suspended, by retarding or suspending the molecular changes constituting nutrition and disintegration, and by contact with certain toxæmic agents, such as carbonic

and hydrocyanic acids and other sedative poisons. If, while keeping these physiological facts in mind, we return to the study of the morbid phenomena preceding and accompanying the existence of diphtheritic paralysis, we shall be compelled to look to the muscular structures involved rather than to any part of the nervous centres for the essential seat of the disease.

The decidedly asthenic character of the primary disease; the aplastic and degenerative quality of all its morbid products and changes, leaving the processes of nutrition and metamorphosis enfeebled during the convalescence; the gradual manner in which the paralysis supervenes; the coincident impairment of the electro-excitability of the affected muscles; the tendency to affect the muscles of different parts of the system in succession, those of one part recovering, while those of another are increasing, while the nerves supplying the muscles thus successively attacked have no common or closely approximative origin in the cerebro-spinal centres; and the absence generally of all direct symptoms of cerebral or spinal disease coincident with the failure of muscular action, all point, in my estimation, to an impairment or loss of susceptibility and contractility in the muscular structures involved. This impairment of the primary property and function of the muscular structnres may depend on an inadequate supply of arterial blood through feebleness of the capillary circulation in the part; or on the toxæmic influence of the products of the retrograde metamorphosis of such exudations as had taken place in the structures during the progress of the primary diphtheritic disease, or on both combined.—*Med. News and Library.*

Rapid and Certain Treatment of Simple Hiccough.—Dr. Grellety once saw a mother as tender, as full of affection for her children, give them a morsel of sugar dipped in table vinegar whenever immoderate or too rapid repletion of the stomach, or any other cause, had induced hiccough. The latter ceased as if by magic. Since then the Vichy physician has very frequently employed this means on his own account, and has never found it without avail.

SLEEPLESSNESS.

The question of the effects of spasmodic contraction of the arteries and arterioles of the extremities, especially in connection with cold weather, presents itself in an interesting aspect in relation to *sleeplessness*. It is now widely known that a condition of cerebral anæmia is essential to sleep, and that if the arterial vascularity of the brain is kept up sleep is out of the question. If, then, the extremities be cold, sleep cannot be successfully wooed. An old theological writer, when weary with long writing, kept sleep at bay by immersing his feet in cold water: by so driving the blood to the head he could continue his labours: whether they were worth much after such expedients may be open to question. With many women cold feet are their bane; they are miserable when awake, and they can scarcely get to sleep. If they can get their feet warm, they can sleep, but not otherwise. But how to get their feet warm is the question with them. Hot bottles to their feet are but partially effective, and often are a complete failure. Now, Dr. George Johnson has pointed out that with the dry imperspirable skin of certain persons with chronic Bright's disease, perspiration cannot be induced by warm baths. But if a person be first wrapped in a cold pack, so as to drive the cutaneous arterioles into spasmodic contraction, subsequent paralysis readily follows on the patient being placed in a warm bath; the vessels become thoroughly dilated, and then perspiration follows. The spasmodic contraction is essential and necessary to the consequential dilatation; and the same holds good of the cold feet of women. Tight boots prevent the flow of arterial blood through the feet during the day, and the subsequent dilatation which follows with some persons does not occur with others. Indeed, it would seem that the anæmia caused by the pressure remains, and the feet are stone cold. Putting them to the fire gives temporary warmth, and so does the hot bottle in bed, so long as it remains itself hot; but as it cools the feet again become cold, and sleep cannot be wooed successfully.

What should be done is to dip the feet momentarily into cold water and then have them well rubbed with hair gloves or a rough towel

until they glow. This seems a very unattractive plan to many minds; but it is just the story of the snowballer's hands. At first the contact of the snow makes the fingers very cold; but perseverance is rewarded by a glow which may become almost a burning heat; the primary contraction of the vessels is followed by secondary dilatation. This is what we will accomplish by the immersion, for a brief period only, of the feet in the cold water, followed by friction. By such means the cold feet become warm, and after this a hot bottle to the feet will keep them warm effectually. With my patients at the hospital the complaint of bad nights now evokes the question, "Are your feet cold?" And the answer very commonly is, "Oh, dreadful!" And it will be found that all narcotics, draughts, pills, or lozenges are futile to procure sleep as long as the condition of the feet is not attended to. Subject the feet to appropriate treatment, and then the sleeping-draught will be successful and attain the end for which it is administered. Macnish said of sleep, "Sleep which shuns the light, embraces darkness, and they lie down together most lovingly under the sceptre of midnight." Very true; but cold feet will upset the whole arrangement very thoroughly.—J. Milner Fothergill, in *Philadelphia Medical Times.*

Westphal's Diagnostic Point in Locomotor Ataxia.—Professor Westphal about a year ago asserted that he had discovered a pathognomonic sign of sclerosis of the posterior columns. It is a very simple one. When in health, sitting with one knee across the other and the foot of the uppermost leg freely suspended, it is well known that a smart tap with a narrow instrument, such as a ruler, delivered on the tendon of the quadriceps, just below the patella, will cause the foot and leg to spring up with a jerk. Well, Dr. Westphal maintained that this jerk does not occur in posterior sclerosis, and that its absence is a sure sign of the presence of that formidable disease. His conclusions were attacked by several observers at the last meeting of the British Medical Association; and it seems pretty clear that his statement requires modification. No doubt the absence of this involuntary act is a significant sign of some important organic change. A new study of it has been made by Dr. S. Tschirjew in the *Archiv für Psychiatrie*, and with great accuracy. The clinical result he reaches is that the absence of the reflex motion in man points to degeneration of the posterior spinal roots and columns at the level of the third and fourth roots of the crural plexus: but that in degeneration of the columns which does not reach so low as this the reflex phenomenon may appear. This very interesting result vindicates the symptom as of great importance.—*Med. and Surg. Reporter.*

The presumption is that every medical man should be and is a man of liberal culture prior to and collateral with his medical education. It is impossible, as we said lately, to pass an evening at any of our great metropolitan societies without being quickly assured that such an assumption is far from being always warranted by the fact. Very rarely can an evening be passed there, especially when the subjects of discussion are such as to invite chiefly surgical speakers, without palpable evidence being forthcoming that a man may hold a prominent position in leading hospitals without having the ordinary culture of an educated gentleman. This is much less frequently the case when physicians are the speakers. But if this be so at all, as it undoubtedly is, in the higher ranks of the profession and in the chief centre of professional distinction, it is probably hardly less true in the general mass. The preliminary education of the medical practitioner has not, until lately, been such as was required by the bar or the church. It is even now, on the average, of a much inferior standard. This is largely the fault of the great Universities of Oxford and Cambridge, which have repelled instead of inviting the young aspirants to medicine to take their place alongside of the great body of English gentlemen educated at those Universities, and have exiled the profession of medicine from the *almæ matres* of the arts and sciences.—*British Medical Journal.*

Surgery.

TREATMENT OF STRICTURE.

BY S. MESSENGER BRADLEY.

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And now a word or two before we part upon the subsequent treatment—that is, the treatment of urethral strictures after you have restored the passage sufficiently to pass a No. 4 English catheter. There are three plans open to you—gradual dilatation, immediate dilatation by divulsion, and internal urethrotomy.

In favour of gradual dilatation we can say much; it is perfectly safe, it is not necessarily tedious, and though, like every other plan, it is followed by relapses and recontractions, it is probably less liable than the others to this serious drawback. If employed, the best method is to keep the patient entirely in bed, and almost constantly to keep a catheter in his bladder, only taking one out to put another and a larger in its place. In this way a tight stricture may generally be dilated up to admit a No. 12 or 14 English size in a fortnight. Beyond this degree of dilatation I do not care to go, in spite of what the Americans say in favour of much greater dilatation. Personally I do not tell my patients that they are cured of a stricture, but, on the contrary, urge them to learn to pass an instrument for themselves or to present themselves for examination three or four times a year. Gradual dilatation practised in the manner now mentioned is certainly calculated to promote the absorption of exuded lymph and even organized fibrin, but that urethras so treated may yet relapse is sufficiently attested by the history of a case in Mosley ward, in which we followed out this plan *de rigueur*, and yet where the stricture recontracted, so as not to admit a No. 3, in less than three weeks.

In favour of immediate dilatation a good deal may be advanced. When the kidneys are healthy, it is, I think, quite a safe procedure. It is not a very painful one: e.g., I constantly perform it, and never give chloroform; the patient is not confined to bed more than a day or two, and it is of course speedy. My own experience goes to show that relapses are rather more frequent than from gradual dilatation, but that with proper instructions as to having an instrument passed at stated intervals, and perhaps with a few lessons in catheterism so as to enable the patient to look after himself, this should not lead to future difficulty. In many cases the stricture is confined to the submucous tissue, and this, being naturally more brittle than the elastic mucous lining, will be ruptured by the divulsor without any lesion taking place in the lining membrane; in other cases, where there has been, from ulceration, loss of mucous membrane, of course *both* will be torn. In the former case no hæmorrhage takes place in the latter there is a little bleeding, but always very trifling, and soon ceasing if left alone.

Of internal urethrotomy, gentlemen, I have no personal knowledge; but, although I am aware that abler and more experienced surgeons than myself practise and speak highly of it, I cannot but regard the operation with extreme suspicion and disfavour. In boldly criticising it, then, as dangerous and unsatisfactory, I would have you remember that it is the criticism of one who has never performed it, and who, I think I may add, never will. I dislike the operation for the following reasons: it is perilous at the time, for I have known death to follow from hæmorrhage in a few hours; it is pregnant with danger for a considerable time after the immediate risk is over, for I have known death from septicæmia to follow ten days after its performance; and it is not attended with any advantages over immediate, and still less over gradual, dilatation, in being less prone to relapses, for I have known a case twice operated on by internal urethrotomy which yet resisted the passage of any instrument a few months after the second operation I quite fail, then, to see, gentlemen, what there is to commend this elegant operation. It is true we hear of "organization of the blood-clot," and of the "cicatricial splice" thus fashioned being more elastic than ordinary scar tissue. Is not this nonsense? Imagine the crowning glory of antiseptic surgery—the organization of the blood-clot—taking place in an incised urethra; that is to say, in an incision washed every few hours in urine! The greater

elasticity of the cicatricial splice, again, however it be formed, is mere matter of assertion; there is nothing to show *why* this should be so, and there are no reliable comparative statistics to prove that it *is*. In those cases of tight, or it may be impermeable stricture, where the perineum is riddled with fistulæ, the remedy is not, as it appears to me, internal but external urethrotomy; and I myself anticipate the day when internal urethrotomy shall be relegated to the limbo of discarded surgical operations, and when we shall be content to treat strictures of the urethra without this modern improvement.—*London Lancet.*

EXTIRPATION OF THE RECTUM.

The difficulty in the treatment pertains to the establishment of efficient drainage of the wound, combined with oft-repeated antiseptic injections, or even permanent irrigation with an antiseptic solution. In relation to the operation itself, malignant growth of the rectum may be classed as follows:—

I. The circumscribed tumour, easily removed by excising a segment of the rectal mucous membrane.

II. The diffuse infiltration of the rectum, including the mucous membrane of the anus.

III. The diffuse infiltration beginning about the sphincter of the anus.

In cases of the first class, the field of operation being exposed by forcible digital dilation, or by the introduction of Sim's speculum, the tumour is caught and drawn down towards the anus and excised. The next step of the operation consists in introducing a long narrow bistoury on the afflicted side near the margin of the anus, and pushing it upwards underneath the mucous membrane until its point is perceptible in the wound occupying the former seat of the tumor. Through the channel, thus made, a drainage tube is passed, after which the lips of the wound in the rectum are accurately united by sutures. If union by first intention ensues, the cavity without the rectum, can be easily cleansed, with antiseptic injections through the drainage tube. Malignant diseases of the rectum which begin at the anus, necessitate the extirpation of the entire viscus. Before dividing the tube between the healthy and diseased portion, silk sutures should be drawn through the former in order that it may subsequently be united to the healthy skin. After this operation, also, a number of drainage tubes are inserted along the rectum, the entire length of the wound. If the peritoneal cavity was first opened during the first act of the operation, the wound in it is closed, after thorough disinfection, with catgut sutures. In cases where the disease diffusely infiltrates the rectal mucous membrane above the sphincter, the affected portion is removed, after having been anteriorly and posteriorly divided in the median line; the upper portion being then drawn down is united by sutures with the mucous membrane, lining the sphincter, drainage having been provided for as in the previous cases. The advantages of the operation are greatest, when the lower portion of the gut is sacrificed, because in relapses, there is no such painful impediment to defecation as invariably supervenes when the sphincter of the anus is divided.—*R. Volkman, S. Klin. Vorträge.—Hosp. Gazette.*

SUGGESTION FOR TREATING SWOLLEN FINGERS.—A correspondent writes to the *Medical Times and Gazette*, London: Allow me to suggest to your readers the use of the material in the treatment of the swellings of the fingers, which are often tedious and painful, in persons of rheumatic or gouty constitution. For two or three years past I have used a piece of an india-rubber finger-stall, in fissures and slight cuts of the fingers; and for twelve months or more I have used it in cases of thickening or deposit around the joints of the fingers after injury, with great relief to the patient. It has seemed to me that the brown finger-stalls of pure rubber are better than black or vulcanized. A piece of tubing may be cut into lengths of about an inch or an inch and a half. One of these can be slipped over the joint by the patient himself, after he has been taught how to do it. It should be worn constantly, day and night. The patient will soon learn how to roll it off and reapply it after washing his hands. When it has become too loose to give the necessary support another length can be taken.

REMOVAL OF SUPERFLUOUS HAIRS.

BY L. DUNCAN BULKLEY, A.M., M.D.

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The method to be described is founded upon the idea of reaching down into the follicle, after extracting the hair, and thoroughly breaking up its bottom and sides, thereby exciting an inflammation which seals it from its base to its orifice. This is accomplished in the following way: A small, three-sided, straight, surgical or glover's needle is firmly inserted at its blunt extremity in a convenient handle; the smaller the better. The one which I use was made for holding a needle to be employed in manipulating microscopic preparations. The edges of the needle should be sharp, and may require grinding, even when new. A good pair of epilating forceps are also required; their edges should be well fitting, and such as will not cut the hair, and the spring should be rather weak, that it may not tire the hand unnecessarily.

The needle in its holder being taken in the right hand, as one holds a pen, a hair is seized with the forceps in the left hand, and the point of the needle is engaged in the orifice by the side of the hair, before the latter is extracted. Gentle traction is then made upon the hair, and at the same time slight pressure upon the needle, and as the former slips out the latter readily enters the follicle for a little distance. It is then thrust in, to a little greater depth than that occupied by the hair, as shown by the root-sheaths on the extremity of the latter, and with a delicate touch it may be readily perceived when it has gone to the bottom, or rather when it has penetrated the latter a little, and its sides are closely embraced by the follicle. A little experience soon shows this, and the error can be made of not having the needle penetrate deep enough far more easily than that of going too deeply. A clean needle can do little if any harm even when piercing the entire thickness of the skin.

When the needle is fairly in the follicle, it is given a number of turns or twists, by rotating the handle between the thumb and forefinger, and when it is withdrawn the sharp edges of the needle are seen to be filled with epithelial debris scraped from the sides of the follicle, and very shortly after a drop of blood or serum is seen to issue from the orifice of the recently irritated follicle. Occasionally blood will follow immediately, and if it is not controlled, in considerable quantity, but this need never give trouble, for it is readily arrested by firm pressure with the finger, with a little ordinary picked cotton or styptic cotton. I have considered it better when but a little blood followed the needle, or when only serum was observed after a few moments, because when there is a larger flow of blood it indicates rather that the needle has missed the follicle, and either gone one side of it, or penetrated its walls, and has failed to reach the bottom, where the new hair takes its origin; though of course it is quite possible to penetrate through the base of the follicle, and pierce a little artery below. In by far the larger number of insertions of the needle I do not draw any blood, but only observe the serum exuding soon after each puncture.

Dr. Bulkley goes on to say that at first he dipped his needle in carbolic acid before each insertion, in order to make sure of exciting inflammatory action, but latterly has repeatedly omitted it, because he doubts the necessity for the extra irritation caused by its use. The procedure requires tact and patience, and also several sittings. It is difficult to treat more than twenty-five to forty hairs at a sitting. At the first trial the needle does not enter every follicle at which it is aimed, or it may not penetrate deep enough to destroy the base and the papilla, or the inflammation excited may not be active enough to close the follicle. The Dr. has operated successfully on four patients, and in no case have the hairs returned, although one of the operations was performed nearly two years ago.

Caseous Coryza.—This disease, which is as yet but little understood, and must not be confounded with fetid ulcerous rhinitis, is characterized by the accumulation in the interior of the nasal cavity of a caseous material analogous to that contained in certain sebaceous cysts, and that may reach such an amount as to cause deformity and produce anosmia. The disease frequently manifests itself after an attack of erysipelas. In the first stage the patient is annoyed by an abundant and fetid sero-purulent secre-

tion mixed with caseous lumps, the expulsion of which affords temporary relief. Little by little the obstruction of the nasal fossæ and consequently the anosmia becomes more complete, and the features in the vicinity of the nose commence to show deformity. The diagnosis of caseous coryza presents great difficulties because of the danger of confounding in its different stages either with periostitis of the jaw, or with a polyp, or with a malignant tumour of the jaw or nasal fossæ, or lastly with caries of the bones of the face; and yet an accurate diagnosis is very essential, since in cases of malignant growth very grave surgical operations even to removal of bones may be indicated. The treatment consists in abundant and frequently repeated irrigations, and in the cleaning out of the nasal fossæ and the removal of visible portions of the tumour, by means of the proper instruments. The patient must aid the operator by making efforts to blow through the nose.—*Giornale Internationale delle Scienze Medicale.—Le Mouvement Medical.*

Dr. C. T. Poore, in the *N. Y. Medical Record*, draws the following conclusions in regard to hip-joint disease:—1st. That the causes of death directly traceable to coxalgia are amyloid degeneration, tubercular meningitis, and exhaustion. 2nd. That there is an intimate connection between the tubercular diatheses and amyloid degeneration, so that those of this predisposition seem peculiarly liable to this complication subsequent to suppuration in connection with diseased bone. 3rd. That exsection does not, as a rule, increase the amount of suppuration. 4th. That death is not as a rule due to, or hastened by exsection. 5th. That the removal of carious or necrotic bone from the hip-joint is followed by an improvement in the general condition of the patient, and that the chances of his recovery are improved thereby. 6th. That in patients of a tubercular diathesis, the question of excision should earlier be taken into consideration than in those of a non-tubercular diathesis. 7th. That repair in a joint after excision is no proof of the non-existence of amyloid degeneration.

Midwifery.

Hôpital de la Pitié.—(Service de M. Le Dr. Gallard.)

TREATMENT OF CANCER OF THE UTERUS.

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The only method of treatment which can be efficaciously employed in cancer of the uterus so as to avoid relapse is its destruction *in loco*. . . . Recamier's operative intervention consisted in practising ablation of the uterus; but this method ought to be most formally proscribed, for it cannot avoid injury to the peritoneum.

Surgical interference will be most efficacious at the beginning of the affection, for at that time the cancer is not of too great extent, and only affects the neck of the womb. In such case, operation will afford relief, for it will free the patient of a focus of infection and of an excessive secretion—grave causes of debility. . . . . A first general and absolute rule is to operate in the depth of the vagina, great care being taken not to draw the uterus down to the vulva. In view of a liability to hæmorrhage, cutting instruments should be employed as little as possible. Chassaignac's ecraseur is, on this account, an excellent instrument, but its application is extremely difficult, and its introduction constitutes one of the most delicate steps of the operation. Maisonneuve's loop, or the galvano-caustic wire, will prove the better instrument whenever it is possible to completely seize the tumour and surround it in its totality. . . . When the wire-loop of the galvano-cautery is employed, care must be taken not to allow the platinum wire to attain too great a heat; and an intermittence of the current, of short duration, should from time to time be made. If the platinum wire be fine, you can succeed in directing it with the fingers, and thus seize the neck of the womb perfectly. The whole difficulty consists in maintaining the loop in an axis perpendicular to the cervix, so as to obtain a complete section: this will be obtained with difficulty, in proportion to the friability of the cancerous tissue. It will therefore be always necessary to be prepared to employ some other operative procedure should you not succeed with the first. It is never necessary to leave an operation uncompleted.

Specula are commonly employed to find the cervix; but these instruments present great inconvenience, because they hinder operative manœuvres, or even render them impossible. The univalve speculum is almost the only one of any utility, or, at all events, of much advantage.

The mode of treatment will vary according as we are concerned with the fungating form or the ulcerating form. For this latter form, recourse will not be had to caustics, but to the application of the red hot iron, which will often be followed by success. I have also had an idea, in this form of cancer, of practising cauterizations in the depth of the morbid tissue. For my own part, I avow that I have only had recourse to this proceeding under conditions in which it was impossible to employ other forms of treatment. The proceeding consists in this: by means of a Pravaz syringe, intended for this purpose, I inject the tissues with perchloride of iron or acetic acid. These injections provoke mortification of the tissues and prevent hæmorrhage.

Lastly, if destructive processes fail, a purely palliative treatment must be instituted,—the sole object being to diminish the sufferings and to prolong as far as possible the life of the patient. The first point in the treatment will be hygiene in all its forms, with reference to air, food, rest, and cleanliness. To build up the patient's forces, recourse will be had to quinine and iron, and especially arsenic, which, it appears, possesses certain anti-cancerous properties. For insomnia, conium will be prescribed; poultices of fresh hemlock, or injections of a decoction of hemlock, or hemlock pills may be employed. In the later stages, large doses of morphia, or morphia and chloral, may be required. The discharges should be combatted by detersive and antiseptic injections. The formula which I employ is this: carbolic acid, 3ijss; alcohol, 3xxx; one or two tablespoonsful of this solution in a quart of water. Locally, charpie may be employed, saturated in this solution pure, or in tannin. In the last place, metrorrhagia is a very grave accident likely to occur. It may be treated by rest, cold water, and position. The tampon, too, may be employed, but only with great prudence and in extreme cases. It is also necessary to change it frequently, and to pack but lightly its component parts.—*Le Practicien.*

CHRONIC CERVICAL METRITIS TREATED BY INTERSTITIAL INJECTION COUPLED WITH DILATATION.*

BY J. M. BENNETT, M.D.

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Having tried most of the constitutional and local formularies recommended by our most celebrated authorities, I was induced to try the interstitial injection of iodine, from the fact that I had, in the first place, obtained more benefit from its local application in the form recommended by Dr. Greenhalgh than from any other treatment; and secondly, from the consideration that, if such benefit could be gained by its application to the indurated covering of the os uteri, much speedier absorption and more lasting results might be attained by the absorbent agent being brought into direct contact with the new hypertrophic matter distributed in the midst of the uterine tissue, in a position where absorption might be favourably sought. Acting upon these bases, I first prepare my patient both generally and locally; the latter by relieving any super-engorgement by means of local depletion, carried out by means of cupping, the frequent use of warm water, and the application of glycerine, so as to induce osmotic action, care being taken to avoid the period of menstrual excitement. I then use a simple modification of the hypodermic syringe, which is sufficiently long to be used with Ferguson's speculum; its points are made of eighteen-carat gold; and the other portion, which might come in contact with the iodine, bromine, or other agent inimical to any metal less resistant than gold or platinum, is mercurially gilt. The instrument should be charged with a solution composed of ten grains each of the iodide and bromide of potassium, to which half a drachm of tincture of iodine and sufficient distilled water should be added to bring it up to two drachms. I then either puncture through the speculum, leaving the uterus free if the os and cervix be very large and low down, or fix it with Sims's tenaculum, using a duckbill speculum. I generally make from three to five punctures, according to the amount of hyper-

* The substance of a paper read before the Lancashire and Cheshire Branch of the British Medical Association, 1873.

plastic matter to be absorbed. A cotton pledget well soaked in glycerine is placed against the part, and rest enforced for at least twelve hours. I seldon find more than three operations are required; and I have never found any disturbance of moment set up, either generally or locally, by the procedure; on the contrary, I have had a number of cases turn out successfully when other methods had proved unavailing.

I have now a patient under observation, thirty-eight years of age, who had been the mother of three children before she was thirty, who had suffered from subinvolution, followed by chronic cervical metritis, and remained barren until after December last, when I treated her by the foregoing method. She is now in the fifth month of pregnancy, and enjoying good health.

In most cases I conjoin the treatment with dilatation by means of the sponge tent, which I put in practice after the first effect of the interstitial injection has passed off. By means of these combined methods of precedure my most sanguine expectations have been fulfilled; the hypertrophied os materially lessened, and resolved to its healthy condition, and that with an absence of those after-consequences, such as loss of tissue, painful cicatrices and stricture, which must have presented themselves to the practitioner who has steadily adhered to the mode of treatment by caustics, cauteries, &c.

I may add that I have ventured to try this mode of treatment in some cases of chronic subinvolution, with this difference that I first began with the interstitial injection of a solution of ergotin, and followed it after an interval with the iodine. My success has been such as to warrant a more prolonged trial.

The only drug administered has been the bromide of potassium in large doses, with the object, first, of quieting the excitement of patients, and secondly, of obtaining some of the benefits described by Professor Binz, of Bonn, who speaks of the potash salts as being positively specific in sub-involution; and, strange as it may appear, I have many times seen advantages derived from a continuous use of this salt quite equal to those described by Dr. R. Williams, who attributed such wonderful powers to its action in splenic hypertrophy.—*Lancet.*

MANAGEMENT OF BREECH PRESENTATION.

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Do not hurry the early stages of a breech case, and never put your finger (and still less a blunt hook) around the child's groin. At this period the breech is aiding you very materially, all the time, by its action in dilating the parts. But the instant that you find it distending the perineum you should change your tactics entirely. Having placed the patient on her back across the bed, with her feet resting on two chairs, give one limb into the care of the nurse, and the other into that of a competent physician, whom you have previously summoned, and who should always keep one of his hands free, so that he may assist you as required. The chief principle in the delivery is this: that the force that is to expel the child must come from above, and not from below. Therefore, now give a large dose of ergot hypodermically, in order that it may produce a powerful effect instantaneously upon the uterus. As soon as the cord comes within reach, get hold of it; and then ask the physician who is assisting you to press down upon the head with all his force. The patient, if she is a woman of any force of will at all, ought not to be under the influence of anæsthetics, and you should call upon her to bear down as strongly as she possibly can; telling her that the life of her child depends upon her exertions. When all these forces are called into play, the result is usually a very speedy delivery. In a second or two you can get two fingers into the child's mouth, and thus make traction by means of the inferior maxilla.—Dr. T. Gaillard Thomas, in *Medical and Surgical Reporter.*

Phymosis.—M. Huet, of Rouen, operates as follows: The prepuce on its dorsal aspect and opposite the base of the glans is pierced by a needle carrying a caoutchouc thread; the portion of the prepuce in front of the puncture is then ligatured, and the operation is finished. At the end of three or four days the section is completed. The patients do not suffer, and may, if necessary, continue their ordinary occupation. M. Huet has seen the operation succeed in eighty cases, including both old men and children.

Original Communications.

THE EXTERNAL TREATMENT OF SOME OF THE MORE COMMON FORMS OF SKIN DISEASE.

(Read before the Toronto Medical Society.)

BY J. E. GRAHAM, M.D.

In taking up the external treatment of some of the more common forms of skin disease, I wish to direct your attention principally to eczema, psoriasis, and sycosis. I shall say little of the internal treatment, not that I consider it of small importance, but because, in my opinion, the external treatment is often made little of by practitioners. There is no doubt but that skin diseases are most successfully treated by a proper combination of internal and external remedies.

I. *Eczema.* I consider eczema to be a catarrhal inflammation of the skin, which may present very different appearances at different stages of the disease and in different constitutions. For purposes of treatment, it may be taken up under three heads,—eczema simplex, eczema rubrum, and eczema impetiginosum. We will take up first

ECZEMA SIMPLEX,

as it appears, for instance, in children. Here we have redness of the skin, followed by the appearance of vesicles; the vesicles break, and a transparent sticky fluid exudes, which may harden into crusts and scabs. In acute eczema, it is well to avoid the use of ointments, as the lard itself is irritating to the skin when the latter is in an inflamed condition. Water, even, may have an irritant action, especially well water. I remember seeing a case made infinitely worse by the application of a wash in which well water was used. It is better, then, to apply either dry powders or astringent lotions, which ought to be made with rum or distilled water. A wash which T. Fox recommends is,—

℞ Pulv. calamin ..... ʒi
Zinci oxidi ..... ʒss
Glycerini ..... ʒij
Aq..... ʒvi

Ft. Lotion.

To be applied with a small brush.

Instead of this, the lotio plumbi et opii may be used.

The following powder is recommended by Prof. Hebra:

℞ Zinci oxidi .....
Pulv. aluminis.....
" rad. iridis ....āā ʒi
" amyli ..... ʒij

To be dusted on the part affected.

When the inflammation has subsided and the eczema has taken on a more subacute character, astringent ointments may be applied. Of these, the most common is the ung. zinci oxidi. I have used, to a very considerable extent, the following:

℞ Ung. zinci oxidi.....
" plumbi .....āā ʒss
" hydrarg. oxid. rub .. ʒij

M.—To be applied externally.

In an acute attack of eczema simplex, these are usually all the remedies required. The disease runs a certain course, and has a tendency to heal, providing that all irritants are removed.

ECZEMA RUBRUM.

This is a form which frequently attacks persons debilitated by overwork or bad surroundings, and who, of course, require appropriate hygienic and internal treatment. It may be divided into acute and chronic: the former very often terminates in the latter. In the acute form, it presents a very red appearance, and is of a very sensitive character; hence, it is never wise to use stimulating ointments in the earlier stages. When the part is very irritable, it is better to use bran infusion, or decoctions of marshmallows, or poppy heads. If there is much weeping or exudation, dry powders may be applied, oxide of zinc, starch, &c. After the discharge has ceased, and if the parts become stiff and irritable, it is better to use some mild form of ointment. The ointment used by Hebra, and one which I have found to be of the greatest benefit, is ung. diachyli. A piece of fine old linen cloth is smeared over with a layer of this ointment and bound over the part. I might say here that this is the best way of applying all kinds of ointments when there is much irritability. Ung. zinci oxidi may be used, or that of which I spoke in the treatment of eczema simplex. Sometimes the

part becomes covered with a crust, which ought to be removed by soaking in ol. olivæ, or by poulticing with linseed meal. As I have before stated, the acute very frequently passes into the chronic form. In the latter, of course, a different mode of treatment must be adopted. T. Fox divides the chronic form into three varieties:—

I. In which the disease is light.

II. Marked by abundance of scabs, weeping, and the formation of crusts.

III. In which there is considerable thickening and infiltration of the skin.

In the first form—that is, when the disease is light,—any of the following astringents may be used:—

1. Borax, ʒss; glycerine, ʒi; rose water, ʒviij.

2. Zinci oxidi, ʒij; glycerine, ʒi; lead water, ʒiss; aq. calcis, ʒvi; or ordinary ung. zinci benzoat.

In the second form, that marked by the formation of scabs, infiltrations, exudation, crusts, &c., the tarry compounds are used with benefit; for instance, the ung. picis liq. of the pharmacopœia, or even the pure tar, where the skin is not too sensitive. It is best applied with a small brush. In almost all cases, the tar should be used carefully at first, as it does not suit every patient. Even in cases where, to all ordinary appearance, it would be good treatment, it is found not to answer. Instead of tar, pyroligneous oil of juniper, or the liq. carbonis detergens, may be used. Tar may also be used in combination with the soap treatment and continuous bathing. I have now a case of this form of eczema which I am treating as follows:—At night the tar ointment is applied, and allowed to remain through the whole night; in the morning, the spirits saponis viridiis applied, and in half an hour the patient goes into a bath, where he remains for half an hour. The skin is then gently anointed with ol. olivæ, and he is allowed to follow his usual amusements throughout the day. At night, the same process is gone through. This is a tedious process, but I have seen cases in whom every vestige almost had disappeared in three or four weeks' time. Instead of remaining half an hour, patients may remain several hours. I have seen them remain the whole day in a bath.

In the third form of this disease, the soap treatment is the best. According to Hebra, it is applied as follows: the part is rubbed with a small piece of the sapo. viridis, a little water being used to produce a lather. It is then allowed to dry, and some mild ointment is applied, as ung. diachyli or ung. zinci oxidi. The ung. hydrarg. iodid. virid. is also used. Iodide of potassium may be given internally. If the infiltration and thickening of the skin is very great, liq. potassæ may be applied with a brush. It must be done carefully.

Before concluding this part of my subject, I might mention a treatment brought into use by Balmanno Squire, viz., the glycerole of the sub-acetate of lead. The formula is as follows:—

Plumbi acetat	5	pts.
Litharg	3½	"
Glycerine	20	" by weight.

Mix and expose for some time to a temperature of 350°F. Filter through a hot water funnel.

A number of cases treated with this application are given by Duhring and Van Harlingen, of Philadelphia. Many of them were cured in a remarkably short time, and all except one benefitted. They say:—'The results in the cases noted, and also in others coming under our observation during the last six months, lead to the following conclusion. In the glycerole of the sub-acetate of lead, we have a valuable addition to the therapeutics of certain forms of chronic eczema, particularly eczema rubrum of the lower extremities. It is most useful in those cases where the affection is extensive, of a dusky hue, accompanied by much weeping, oozing, and infiltration of the skin, together with swelling and œdema of the subcutaneous tissues, and a full and varicose condition of the venous circulation. In such cases glycerole of the sub-acetate of lead, used with diligence and accompanied by bandaging, constitutes a remedy of the highest value." As these kind of cases are very common, especially among the poorer classes, this remedy will in future be of great value.

ECZEMA IMPETIGINOSUM.

This is a form of disease in which there are scabs and a considerable amount of suppuration. Formerly, cases of this kind were put under the head of impetigo. The internal treatment will be tonics, cod-liver oil, fresh air, good diet, &c. Where there is a strong tendency to suppuration there will be a low state of the constitution, which must be attended to if the disease is to be successfully treated.

Now, as to the local treatment. The first process is allaying irritation and removing scabs. This may be done by linseed poultices and poppy-heads. After the scabs have been removed mild astringent ointments may be used. If the disease occurs on the scalp, the hair must be cut short before the above treatment is adopted. In this condition of the scalp pediculi are often present. These may be destroyed by ung. staphisagriæ or chloroform vapour. Coal oil has been used for this purpose by Hebra. Sometimes after the crusts are removed it is requisite to first use sedative lotions, on account of the irritability of the part. In these cases, cod-liver oil has been used with good effect. Generally speaking, in eczema impetiginosum, the internal treatment is of equal, if not of greater importance than the external means.

I shall now briefly give the outline of treatment for eczema attacking particular parts of the body.

Eczema rubrum of the hands may be successfully treated by ung. diachyli, being careful that the ointment is well applied between the fingers. Hebra recommends the wearing of india rubber gloves. These may be worn at night only, or during day and night. The perspiration retained softens, and has a curative action on the skin. I have tried this plan of treatment, but with little success. I have always found that eczema of the hands is most successfully treated by the ordinary methods.

Eczema of the scalp.—Under the head of eczema impetiginosum, I spoke somewhat of the treatment of this condition. In order to remove the crusts, the head should be well soaked in olive oil. It may be applied by rags being thoroughly saturated and bound on. Some have recommended the persistent use of arsenic internally; but in cases of children teething, the disease so frequently recovers of itself, when the process of dentition is over, that I do not think it advisable to employ such an heroic remedy.

In summing up, then, the local treatment of eczema, the following points may be noticed:

1. In the stage of irritation, when there is much exudation present, astringent lotions and drying powders should be used. The use of ointments must be avoided.

2. When the exudation has ceased and the part has become dry, ointments may be tried.

3. In eczema rubrum, when there is a good deal of scabbing and crusting, use tar, which must be done with care, as some will not bear it.

4. When there is great infiltration and thickening of the skin, the green soap treatment will give the best results.

In all cases of skin disease, successful treatment depends to a large extent on correct diagnosis and a proper appreciation of the pathological conditions present. It is always well to examine for a syphilitic history, as this is, of course, of the greatest importance in the treatment and also in the prognosis.

(To be continued.)

THE DEVELOPMENT OF THE GRAAFIAN FOLLICLES DURING PREGNANCY.—Contrary to the opinion then prevailing, and contrary to that now generally taught (for example, Barnes' "Diseases of Women," p. 28), the late venerable Professor of Midwifery at the Jefferson Medical College, Dr. Charles D. Meigs, used to teach that the development of the Graafian follicles continued uninterruptedly during pregnancy. This opinion has been confirmed by some researches and post-mortems made by Dr. Slaviansky, which we find in the *Med. Centralzeitung*, October 30th. A woman of twenty-four years, who died suddenly in the third month of pregnancy, displayed follicles on the point of bursting, and recent corpora lutea. This may be said to decide a question of considerable physiological interest.

A CASE OF CARDIAC THROMBOSIS, OR POLYPUS OF THE HEART, OCCURRING IN CONNECTION WITH PNEUMONIA.

(Read before the Toronto Medical Society.)

BY C. K. CLARKE, M.B.

The patient in whom this heart complication existed was a male, who had been an inmate of the Toronto Asylum for about eleven years, and at the time of his death was fifty-six years of age. Physically, he was a strong man, and was always considered one of the healthiest patients in the building. He was very industrious, and manufactured all the soap required for the use of the institution—an occupation which is far from being a healthy one.

One morning in April he complained of being indisposed, and was found to be suffering from an attack of acute lobar pneumonitis, the lower lobe of the left lung being involved. Opium was given; and as the patient was now troubled with diarrhœa, this medicine proved doubly useful. The diarrhœa was exceedingly troublesome, and as the poor fellow was losing strength rapidly, stimulants were administered freely, apparently with benefit. The case seemed to be progressing favourably enough until the fourth day, when the patient complained of a smothering sensation, was restless in his bed, the pulse was feeble and fluttering, and the general appearance anxious. This state of things lasted for a few hours, when death took place. As the case seemed to be a peculiar one, and the cause of death not plain, it was decided to make a post-mortem examination. The autopsy was made twenty hours after death, *rigor mortis* marked, and body well nourished. The pleura was adherent on each side, the adhesions being firm and evidently of long standing. The right lung was crepitant and quite healthy in every respect. The lower lobe of the left lung was found completely hepatized and of the consistence of liver. Upon section, some dark grumous fluid exuded, but the vesicular appearance of healthy lung tissue had completely disappeared. The heart was next examined, and was of normal size and healthy appearance. The right ventricle was almost filled with a firm fibrinous clot of a yellowish-white colour, entangled with the columneæ corneæ and chordæ tendineæ. This clot extended into the pulmonary artery, and was continued for some distance into its right and left divisions. I have preserved the portion of the clot which was found in the ventricle; but, of course, this does not convey to you any idea of the original size. What you can see here will hardly fail to convince that the clot was formed at a considerable time before death.

This case was an interesting one, occurring as it did in connection with pneumonia, and shows the importance of watching for such a complication in this disease. Flint, in his "Practice of Medicine," calls attention to the danger that arises in pneumonia from this cause, and seems to think that a considerable proportion of the deaths in this disease are caused by the formation of heart clots, and explains that we may always expect to find the clot in the right side of the heart, because of the obstruction caused to the pulmonary circulation. Owing to this obstruction, the blood on the right side of the heart is impeded in its flow, the fibrin deposited, and a clot formed. In the case of the patient we have under consideration at present, there were two conditions which favoured the formation of a polypus. In the first place, he was suffering from pneumonia, a disease in which there is an increase of fibrin. In addition to this favourable condition, there was severe diarrhœa.

Dr. Martin L. James, of Richmond, Virginia, in an exhaustive paper on "Cardiac Thrombosis," states that the symptoms of heart-clot in the right side of the heart are well marked, and describes them as follows: "The temperature is reduced, sometimes to a degree approaching that which obtains in cholera; the pulse is irregular, usually frequent, and I think will be always found feeble and small in volume. Frequently it is described as fluttering, and sometimes obliterated, except in the larger arteries. The surface is marked by pallor or venous congestion. The dyspnœa, from a clot on the right side of the heart, is peculiar. The patient has no difficulty in performing the voluntary part of respiration, and auscultation shows the entrance of air into the vesicles, and

yet he feels that he is suffocating—the fact being that the respiratory effort has been an abortion in the circumstance—that aeration, its grand end, has failed, because the blood has not reached the lungs on account of the physical obstacle in its path." . . . "The sensations of the patient, too, vary with the location of the clot. If the clot be located on the right side of the heart, he will describe a terrible sense of oppression at the heart itself."

Hope, in his work on "Diseases of the Heart," describes the symptoms of cardiac thrombosis as follows: "A sudden and excessive aggravation of the dyspnœa, without any other obvious adequate cause; the pulse is small, weak, irregular, intermittent, and unequal; the patient is in an agony from an intolerable sense of suffocation; he cannot lie for a moment, and he continues tossing about in the most restless and distressed condition until his sufferings are ended by death."

It will be seen that in the case of the patient referred to to-night the symptoms closely correspond to those described by the authors quoted; and it is doubtful had the nature of his disease been accurately diagnosed could anything have been done to relieve him. Brandy and opium are highly recommended by some in the treatment of these cases, and all seem to be in favour of carbonate of ammonia, on account of its supposed action in preventing the deposition of fibrin from the blood in the shape of clots. The patient had whiskey and opium given freely, but no carbonate of ammonia.

Shortly after the occurrence of this case we had another death caused by the formation of a heart-clot. The patient was only a day under our observation, and had not received much attention. He seemed to be weak and anæmic, but no particular notice was taken of his case beyond this fact. On the morning of his death he went to breakfast, appeared to be very weak, and had to be assisted to his bed almost immediately. In bed he was restless, and would not, or rather could not, keep quiet, and in a few hours died. The symptoms were so similar to those which occurred in the other case that heart-clot was suspected, and the post-mortem examination verified the diagnosis. The lungs were found tuberculous, but there were no traces of pneumonia. The clot was on the right side of the heart, and occupied the ventricle, extending for some distance into the pulmonary artery. The clot was quite adherent to the side of the heart, and required some little force to detach it. In size and shape, as well as organization, it was very similar to that removed from the first case mentioned. There is little doubt but that the formation of the clot was dependent upon the anæmic condition of the patient, in conjunction with tuberculosis. Writers upon the subject consider either of these conditions quite sufficient to account for cardiac thrombosis.

THE PATHOGENESIS OF CEREBRAL HÆMORRHAGE.

Eichler (*St. Petersburg Med. Wochenschr.*) gives the following conclusions:—

1. Primary idiopathic cerebral hæmorrhage owes its production to the rupture of miliary aneurisms ot the smallest cerebral arteries.

2. The miliary aneurisms are *aneurismata spontanea vera totalia.*

3. They are due to a chronic endarteritis identical with arterio-sclerosis.

4. Miliary aneurisms, like arterial sclerosis, are pre-eminently senile diseased conditions.

5. The dissecting aneurisms are sharply separated from the miliary aneurisms. They are simple hæmatomata, and not a cause, but a consequence of hæmorrhage.

6. The capillary dilatations are likewise distinct from miliary aneurisms. They are to be compared with tetangiectases of other organs, and like them, are congenital.

7. The coats of the vessels are in three layers: the intima, the media, and an externa, separated from the muscularis by a simple space.—*Journal of Nervous and Mental Diseases.*

PALUDAL TORTICOLLIS.—M. Jules Simon records a case occurring in a child four years old, who suffered every day about the same time from spasmodic contractions of the sterno-mastoid, lasting four or five hours. It had previously suffered from several attacks of intermittent fever. It recovered under quinine treatment.

Translations.

A Remarkable Case.

At the *Académie de Médecine* on 28th January, 1879, M. Broca presented a pathological specimen which had been sent to him by the Pastor Muston, which was obtained from a young peasant of the Drôme Mountains. The child, otherwise healthy, presented from its birth this abnormal peculiarity, that after falling asleep at night he could not be awakened by any means whatever. In the morning, on the contrary, he was readily awakened quite naturally. One evening he was left alone near the fire seated upon a chair. When the folks returned, they found that he had fallen forwards almost into the fire; a large felt hat he was wearing was completely consumed around his head, which was itself deeply burned; but he had remained in his usual deep sleep. He was put to bed in the belief that the burn was not very deep. The next day he awoke as usual and set out to take care of his flocks, without complaining of any pain, and so on during the following days. At the end of some weeks, however, an immense eschar becoming detached, laid bare the bones of the head, which appeared black and mortified, then all around about the borders of the wound a rosy line revealed the process of separation of the dead from the living. One day at length a sequestrum was detached which comprised the whole of the external table and a part of the diploe of both parietals, of the upper extremity of the frontal and a portion of the occipital. The temporals, covered over by the muscles of that name, had not suffered. Pastor Muston visited the boy at various times, the first time about a year after the accident. The osseous wound had commenced to be covered by fleshy granulations. At a single point, corresponding to the middle region of the right parietal, pulsations were observed isochronous with the cardiac beat. This was explained upon examination of the sequestrum, for at this point it comprised the whole thickness of the parietal, inner table and all. Later, during the following year, these pulsations had disappeared, demonstrating that osseous separation had been effected, as often happens in losses of substance of slight extent, going down as far as the dura mater, but leaving that membrane intact. The wound itself, however, is, at present, almost as large as it was a year ago; the cicatrization is proceeding with extreme slowness. But the young shepherd, who has thus lost a great part of his cranium, has none the less every day attended to his flock. The wound is dressed from time to time by covering it with a rag dipped in oil, over which is placed a felt hat. He frequently carries upon his head heavy loads and thorny branches, and it appears he congratulates himself upon no longer feeling the thorns which previously often pricked the hairy scalp.—*La France Médicale.*

Eczema Marginatum.

At the *Société de Biologie*, M. Vidal communicated some researches upon the disease described by Hebra under the name of eczema marginatum. Under this appellation several parasitic affections which are not eczemas have been confounded together. One form, characterized by its frequent location in the axillæ and on the inner side of the thighs, presents clearly defined borders, which distinguish it from true eczema; its colour is yellowish or brownish, and the parasite which is found is the *microsporon furfur*. It is in reality pityriasis versicolor. Other cases described under the name of eczema marginatum, in which prominences on the skin occur, and the tricophyton is found, and in which the affection may last several years and invade a great part of the body, belong to *herpes circinatus*. But there is a third variety which clinically and microscopically differs from the two preceding forms and resembles the *pityriasis rosea* of Joubert and Bazin. Clinically, this form is characterized by a rapid dissemination of the redness (in a few days). Slight desquamation and small vesicles formed by the agglomerated parasites. The affection, instead of progressing regularly, extending from the median line of the trunk like a pseudo-exanthem of slow course, lasting at least six or seven weeks, presents irregular features in its generalization; and the borders are not limited by an intense redness as in herpes circinatus. Lastly, an important fact, a cure is rapidly and easily obtained by a few sulphur baths, or frictions with Helmerich's pomade.—*Le Practicien.*

Syphilitic Fever.

We extract the following account from a clinical lecture delivered by M. Potain at the *Hôpital Necker à propos* of a case of associated tuberculosis and syphilis, in which the problem was to determine whether the febrile symptoms were due to the tuberculosis or the syphilis. The lecture is published in the *Gazette des Hôpitaux*, 17th October, 1878.—

"Syphilis is, in fact, frequently accompanied by a febrile process; but it is generally only manifested by malaise, perceptible to the patient in a greater or less degree. If, moreover, the latter consult the physician for this indisposition, it often happens that he has not remarked the stains upon the skin, which sometimes are very inappreciable; the physician, for his part, does not think of a syphilitic affection, of which the patient presents or complains of no symptom, and he attributes the fever to some totally different cause. Oftentimes syphilitic fever is confounded with an eruptive fever, or with the beginning of a typhoid fever; the error is the more easy to make because frequently the prostration is extreme, and recalls completely that of synochal fever.

"From this fact a very useful practical lesson follows: whenever the physician finds himself in the presence of a patient affected with a remitting fever of indefinite character, for which he can find no very clear or satisfactory explanation, he ought to look for syphilis.

"In our patient the eruption of roseola immediately decided the diagnosis; but, if this eruption had not existed, we would nevertheless have found that the fever possessed a special character, and was not the fever which ordinarily accompanies the tubercular process. The attacks, in fact, are diurnal, and they commence with an intense chill, followed by heat and transpiration. This character alone should make us think of syphilis; it is altogether different from that of tubercular fever. In tubercular fever the febrile attacks recur at night; they commence, not by a chill, but with fever, sharp and severe, which is afterwards followed by sweating. Lastly, the chill only occurs when the body is covered with sweat, and from the fact of a loss of heat. The difference is therefore considerable between these two processes, as far as the fever is concerned. And if I insist upon this difference, it is not simply for the purpose of making a precise diagnosis; you will readily conceive the therapeutic indications will be different in the two cases.

Saturgine Anæmia, with Double Crural Souffle.

Patient, a man, twenty-nine years of age. Avocation, a decorative painter. He has never had colics, or arthralgias, and he presents no indication of paralysis. But he bears a slight saturnine border of the gums, which denotes, if not an intoxication, at least saturnine contact. He presents all the signs of profound anæmia: excessive feebleness of pulse, vertigo, jugular souffle, weak heart sounds, etc. Lastly, we find in him a special symptom, a double crural souffle.

It is known that when the stethoscope is applied over the crural artery in the normal state, the compression determines a dry diastolic *bruit*, of greater or less intensity, but always single. This *bruit de souffle* is normal. But in individuals affected with aortic insufficiency, Durozier has observed a double *bruit de souffle;* that is to say, that after the first normal diastolic *bruit*, there is heard another *bruit* somewhat less intense. This double crural *bruit* exists sufficiently constantly in patients with aortic insufficiency to be regarded almost as a pathognomonic sign of that affection, if there be at the same time observed a souffle with the second sound at the base of the heart. This peculiar *bruit* may also be heard in other arteries, in the brachial, carotid, etc. But it would be more difficult to determine its presence when it might be complicated with venous *bruits*, so that it is always looked for in the crural artery, where its discovery renders the question less complex. The double crural souffle has not been found in any other cardiac affection; but, by a still unexplained phenomenon, it has been found in patients suffering from saturnine intoxication; the cause of this singular peculiarity has not been determined. . . . . The treatment will therefore consist, apart from the prophylactic counsels which follow from these considerations, in combatting the saturnine intoxication, which is the cause of the anæmia, by the usual medication: purgative, and iodide of potassium. Lastly, we shall promote recuperation by tonics, iron, and sulphur baths.—*Gazette des Hôpitaux.*

Formularies.

A Valuable Expectorant.—Dr. Kessler has used all the expectorant formulæ, besides a great many of his own mixtures, but has obtained best results from the following:

R. Pix liquida.....	gttxx	1
Spts. nitr. dulc.....	ʒi	4
Syr. simpl.....	ʒii	70

M.—S. Teaspoonful night and morning. Very few doses will suffice in most cases.—*N. Y. Brief.*

For Larnygeal Phthisis.—

R Acid carb. concent....	fʒj	4
Tr. iod. comp.....	fʒij	8
Aquæ	fʒiiss	75

M.—S. Teaspoonful three or four times daily by spray or inhalation.

Ivy Poisoning.—Dr. Tydings, in the *Maryland Med. Jour.*, highly recommends:

R. Ext. belladonnæ alc....	ʒi	4
Aquæ	ʒiij	90

M.—S. Apply to parts affected with a feather

Formulas for Giving Medicines to Children.

R. Quiniæ sulph.....	gr. xvi	1	
Acidi tannic.....	gr. ij		13
Ol. menthæ pip.....	gtt. iij		20
Syrupi sarsaparillæ co.	ʒij	70	

M.—S. Dose, one teaspoonful. Shake the bottle before using.

Syrup of chocolate, such as is used at soda fountains, completely conceals the taste of quinine.

An agreeable formula for giving iron to children:

R. Ferri et potassii tart...	ʒij	60
Aquæ cinnamoni.....		
Syrupi simpl.....āā	ʒiss	45

M. et ft. solutio.

S. Dese, one half to one teaspoonful between meals and at bedtime.

Eucalyptus in a Cold of the Head.—Professor Strambio, in the *Gaz. Med. Ital. Lombard.*, has found that prolonged mastication and swallowing of a dried leaf or two of the eucalyptus globulus almost immediately liberated him from all the effects of a severe cold.

THE CANADIAN
Journal of Medical Science,
A Monthly Journal of British and Foreign Medical Science, Criticism, and News.

To Correspondents.—*We shall be glad to receive from our friends everywhere, current medical news of general interest. Secretaries of County or Territorial medical associations will oblige by sending reports of the proceedings of their Associations to the corresponding editor.*

TORONTO, MARCH, 1879.

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☞ Bills have been mailed to every subscriber in arrears. Though some have kindly and substantially acknowledged their receipt, there are many who are still in our debt: we must again urge these latter to pay up. The journal cannot be conducted successfully without funds, and funds we *must* have. Surely, every one who has not paid his subscription will help us to still further improve our monthly issues by remitting promptly the amount he owes. A reference to the date attached to the address-label will show when the subscription in advance became due.

DEATH OF DR. DUNCAN CAMPBELL.

We regret to have to announce the death of Dr. Duncan Campbell, President of the Council of the College of Physicians and Surgeons of Ontario. Dr. Campbell had been long subject to very severe attacks of *angina pectoris*, but has only been confined to the house during the past three months. He was born at Ardchattem, in Argyllshire, Scotland, and at the age of ten was sent to Caen, France, to be educated. At the age of fifteen he returned to Edinburgh, and was apprenticed to Bell & Simpson, Physicians and Surgeons, for five years, graduating at the University of Edinburgh in 1833. He came to Canada in 1834. He was appointed Surgeon to the first battalion of incorporated militia, and served during the rebellion of 1837. At the close of the rebellion he settled in Hamilton, but shortly afterwards moved to Niagara, where he remained until 1858, re-

moving thence to this city. As shown by the Provincial Register, he received the Licence of the Royal College of Surgeons of Edinburgh in 1831 ; M.D., University of Edinburgh, 1833 ; Prov. License, 1834 ; was elected a member of the General Council of the University of Edinburgh, 1859 ; received the M.D. of the Western Homœopathic College of Ohio in 1859 ; became a member and was elected President of the Homœopathic medical board, 1859-69 ; member of the Council of the College of Physicians and Surgeons of Ontario, 1869-1879 ; Vice-President of the same, 1872-73, 1876-77, 1877-78.

A man of great intellectual power, high scholarly attainments and indomitable will, Dr. Campbell did much to further the cause of higher medical education in Ontario while a member of the Council. He was always a hard worker in this good cause and ever evinced a laudable desire to make the diplomas of the College of which he was so active a member, and at the time of his death President, second to none as evidences of thorough practical knowledge. Though he has not lived to see the fruition of his labours, still his good work remains, and we hope that in time many of the reforms in medical education he was so anxious to see carried out will be adopted.

OBITUARIES.

It is with very great regret we notice the announcement of the death of France's greatest hygienist and juris-consult, Dr. Tardieu, at the age of sixty. He was for many years Professor of Medical Jurisprudence at the Faculty of Medicine, a member of the Academy of Medicine from 1859, and once its president. He also was president of the Council of Hygiene of Paris and of the Medical Association of France.

Old Guys' men will regret to learn of the death, on Christmas Day, of James Stocker, M.R.C.S., the old apothecary of Guys. He was connected with the hospital from 1829 up to within twelve months of his death, which occurred at the age of 74.

Dr. John B. Biddle, Professor of Materia Medica in Jefferson Medical College, and Dean of the College Faculty, died on January 19th.

Book Notices.

Beiträge zur Pathologischen Anatomie des Auges. Von Dr. Adolph Alt, Toronto.

Université Laval à Montréal Bureau de la Revue de Montreal, 1878.

Address of W. O'Daniel, M.D., President of the Medical Association of Georgia, delivered at the 29th annual meeting.

The Relations of the Conducting Mechanism of the Ear to Abnormal Hearing. By Samuel Sexton, M.D., New York.

Twenty-sixth Annual Announcement Medical Department, University of Vermont, for the year 1879.

Fifty-third Annual Report of the Massachusetts Charitable Eye and Ear Infirmary for the year 1878. Boston : Alfred Mudge & Son, 34 School Street.

Transactions of the American Ophthalmological Society—12th, 13th, and 14th Annual Meetings. New York : Published by the Society, 1878.

The Use of Calcium Sulphide in the Treatment of Inflammations of the External Auditory Meatus. By Samuel Sexton, M.D., New York.

Excerpta from the Annual Report of the Board of Health for 1878. By Joseph Holt, M.D., Sanitary Inspector of the Fourth District of New Orleans.

Transactions of the American Otological Society. Eleventh Annual Meeting, Newport R.I., July 24, 1878. Vol. II., part 2. Boston : Houghton, Osgoode & Co. ; The Riverside Press, Cambridge.

Vick's Floral Guide, published at Rochester, N.Y., No. 1, 1879, is a capitally illustrated catalogue of seeds, bulbs, and plants, with information as to the selection of seeds, sowing, lawn-making, bedding, balcony gardening, &c., &c. We can recommend the " Guide " to those fond of gardening.

On Fracture of the Femur. By EDWARD BORCK, M.D., St. Louis.

This is a reprint of articles that appeared in the *St. Louis Medical and Surgical Reporter.* The author describes the various methods of treatment advocated by the most eminent surgeons, and compares them with the plan he adopts, which is the double inclined plane, with extension by means of a cord and weight attached to adhesive straps applied to each side of the thigh. The traction is made in a line with the femur as it lies on the double inclined plane. The best results are claimed for this method of treatment.

Habitual Drunkenness and Insane Drunkards. By Dr. BUCKNILL, F.R.S. London and New York: McMillan & Co.; Toronto: Willing & Williamson, 1878.

This is a readable little book made up of articles that have appeared previously in the *Journal of Mental Science, The Contemporary Review,* and *The London Times.* It also contains a report of the author's inquiries &c., respecting the operation of Inebriate Asylums in America, and an address to a meeting of the Medico-Psychological Association, &c., &c. Dr. Bucknill's report on Inebriate Asylums in America, gave rise to many vigorous replies from indignant Americans, but in the preface of this little work he shows, that his report was based upon careful personal inquiry into the working of American Institutions, and upon information obtained from able and experienced American physicians.

Dr. Bucknill takes and defends the view that there are two kinds of drunkards, the habitual and the insane, and discusses the causes and treatment of each kind, and the duty of the State in the matter.

An Atlas of Human Anatomy, illustrating most of the Ordinary Dissections and many not usually practised by the Student, accompanied by an Explanatory Text. By RICKMAN JOHN GODLEE, M.S., F.R.C.S. Philadelphia: Lindsay & Blakiston, 1878.

We have received Part I. of this work, which is to be completed in twelve or thirteen bi-monthly parts, folio size, each part containing four large plates—two figures in each plate, coloured—each plate faced by a page of references, and each part accompanied by an octavo part containing the explanatory text, forming, when complete, a large folio volume of plates and references and an octavo volume of from 300 to 400 pages of explanatory text. The price of each part, including plates and text, is $2.50.

Of this work, by one who, in addition to occupying a very high reputation as an anatomist and a teacher, is a most skilful artist, we can speak in terms of the highest praise. The study of regional anatomy should form an important part of a student's course; and, outside of the dissecting-room, we know of no better guide to recommend students than these plates, which are excellent in every way. We trust the enterprise will meet with a success that will amply satisfy the author and publishers. Part I. shows dissections of the head and neck, each plate being faced by a page of references.

CANADIAN MEDICAL LITERATURE.—We are informed that a work on "Physiological Therapeutics," based on a new interpretation of physiological facts, will appear about the last of March. Dr. T. W. Poole, of Lindsay, is the author.

JOURNALISTIC.—We have received the first number of the *St. Louis Courier of Medicine and Collateral Sciences,* published monthly by the Medical Journal Association of Missouri, Dr. A. J. Steele, Editor; Dr. W. A. Hardaway, Associate Editor; and can heartily congratulate the editors on the appearance of their first issue.

UNIVERSITY OF TORONTO.—Examiners in the Faculty of Medicine for the year 1879:—Physiology and Comparative Anatomy, Dr. Osler, Montreal; Surgery and Anatomy, Dr. Malloch, Hamilton; Medicine and Therapeutics, Dr. Joseph Workman; Midwifery and Medical Jurisprudence, Dr. D. Clarke. Medicine and Arts—Chemistry, Dr. W. H. Ellis; Natural History, Dr. George Sedgwick Minot, Boston.

Miscellaneous.

Chapped Hands.—℞ Carbolic acid, gr. xv; yolk of egg, one; glycerine, ʒiij—mix. A small portion to be gently smeared over the affected surface several times daily.

Perfumed Solution of Iodoform.—Shake tincture of iodine with a fragment of fused potash until the colour is removed, then add cologne or lavender water to cover the odour of iodoform.

Gonorrhœa.—Dr. Bauer, of St. Louis, advocates local treatment. He prescribes the following injection: ℞ Inf. sem. lini. (ex. ʒiij parati) ʒvj; ext. opii aquosi fl. gtts xviij—M. To be used warm every three hours.

Elastic Bands on Battle-Fields.—It has been recommended that all regiments of soldiers should be provided with simple elastic bands for use on the battle-field, in order to stay a flow of blood until the arrival of the surgeon.

Maltine.—From a report by Professor Attfield, which has been forwarded to us, it appears that this is an aqueous extract of malted wheat, oats and barley. It is semi-solid in consistence, and agreeable in flavour. That it is genuine is proved by the fact, which we have tested by experiment, that it is capable of converting starch into sugar.—*London Lancet.*

To Restore Syrup of Iodide of Iron.—L. Myers Connor, of Dallas, Texas, writes to the Louisville *Medical News* that syrup iodide iron which has become oxidized by exposure or age (known by its change from a green to a yellowish red), due to the liberation of free iodine, can readily be made to assume its proper colour by heating the syrup gently with fine iron wire free from oxide (rust).

Favus of the Epidermis.—Dr. Bulkley reports in the *N. Y. Medical Journal* for Feb. six cases of favus occurring on various parts of the body. In three cases it was found on the face, in one on the knee, and in one on the buttock, one on the loin. These cases all came under his observation at Denult Dispensary last year. They yielded readily to treatment, the eruption being slight, in some cases solitary.

Liniment for Chilblains—(Gillebert Dhercourt)—Venice Turpentine, ʒiij; castor oil, ʒjss; collodion, ʒvijss; mix.—Apply the liniment with a camel's-hair brush to the fingers or toes which are the seat of the chilblains, whether ulcerated or not. Repeat as often as necessary to preserve the part from contact with the air, and continue until cured.—*L'Union Médicale.*

Poisoning from an Overdose of Sweet Spirits of Nitre.—Mr. H. Cripps Laurence in the London *Lancet* records a case. The patient had been taking an ounce of sweet spirits of nitre in water at intervals during almost every day for three weeks. He was drowsy, incoherent, delirious, when roused answered questions, complained of headache, and said he had found it difficult to walk straight of late. He could see clearly, irides dilated, acting feebly; constipation, no vomiting, urine scanty, bladder empty. He recovered under diaphoretics and purgatives internally, poultices and dry cupping over kidneys.

M. Ernest Besnier and the majority of dermatologists now a days employ Volkmann's method in the treatment of lupus. This consists in scraping off the diseased parts with small spoons having cutting edges. The operation is desisted from as soon as it is perceived that the instrument is no longer attacking indurated tissues. As this scraping is very painful, the skin is anæsthetised by the ether spray, or the patient is subjected to chloroform. The resulting wound rapidly cicatrises. If the lupus be very extensive, the scraping is spread over two sittings; and, in fact, this is almost always necessary to ensure the complete removal of the indurated parts. Another method of treating lupus consists in making very close punctures in the indurated tissue, which give rise to an abundant flow of blood, and which are renewed every four or five days if necessary. The indurations are not slow to disappear and become effaced, and the skin gradually resumes its normal aspect.—*L'Union Médicale.*

The *British Medical Journal*, with the beginning of the year, has cut its leaves—an immense convenience to all its readers. Another new feature is the establishment of a "Confessional," in which mistakes, errors, or ignorances, can be anonymously reported *pro bono publico*. This feature is to be specially commended. Few men have the nerve to report anything that may possibly tell against them in any way. Journals are filled with glowing accounts of success, to such an extent as to give a very wrong impression of what the status of medical and surgical progress really is. The "Confessional," it is to be hoped, will prove a counter-check. Other journals, perhaps all, could establish it with advantage.—*Ohio Recorder.*

In the *Revista de Medicina y Cirujia Practicas*, published in Madrid on the 22nd Sept., 1878, a remarkable case is recorded as occurring in the surgical clinic of Prof. Kreus. It was a case of normal pregnancy with death of the fœtus at the seventh month, due to a violent fall on the part of the mother. Putrefaction within the womb occurred, and fistulous tracts were formed through the cervix uteri and through the abdominal wall; when these latter formed, those through the cervix healed up. Gastrotomy was performed by Prof. Kreus twenty-seven months after conception. Some fever and signs of slight peritonitis were present for a few days; but the patient subsequently did uninterruptedly well, and a complete recovery ensued.

Diagnosis of the Persistence of the Ductus Arteriosus.—M. Fr. Franck makes an interesting communication to the French Association for the Advancement of Science, in regard to the diagnosis of the persistence of the ductus arteriosus. The diagnosis is founded on the following signs:—The existence of a systolic murmur behind the chest, on the left side of the vertebral column between the spines of the vertebræ and the vertebral border of the scapula, about the level of the third and fourth dorsal vertebræ. The strengthening of this murmur during inspiration. The marked increase of the effects of inspiration upon the arterial pulse. The absence of cyanosis if there are no other congenital lesions.—*Arch. Gen. de Med.*—*Practitioner.*

Charity for Errors in Diagnosis—Prof. D. Hays Agnew, in his address before the Pennsylvania Medical Society, closes with the following words: "There are some persons who never commit errors, or, committing them, never have the magnanimity to acknowledge that they were deceived. I confess that I am humbled every year in making errors in diagnosis. Like Lucretius, I sink the lead over and over again and find no bottom. Indeed, I know I shall never attain to such an imperial reach of wisdom that disease will surrender all its secrets at my bidding. I shall make mistakes as long as I am in the flesh. There never was but one physician who knew all the truth, and He was divine. With what tenderness does nature conceal her unsightly deformities by the interlacing tendrils of ivy or rhus, which she so ingeniously spreads over the smitten tree or the rugged cliff. Emulating her example, let us over each other's imperfections draw with loving hand the veil of charity." There are few medical men, we imagine, who were taught in Philadelphia during the last two decades that do not remember with pleasure the lectures of Professor Agnew at the Pennsylvania Hospital. There was so much earnestness, common sense, and honesty in his discourse that Prof. Agnew was a favorite with all the schools.—*Louis. Med. News.*

Training School for Nurses, Toronto General Hospital.—The Trustees of the Toronto General Hospital have made arrangements for giving, at the Hospital, two years' training to women desirous of becoming professional nurses. Persons wishing to receive this course must apply either to the medical superintendent of the hospital, or to the lady superintendent, upon whose approval they will be accepted as pupils in the hospital. Candidates must be over twenty and under thirty-five years of age. They must be of sound health, and must present, on application, a certificate from some responsible person as to their good character. Applicants will be received one month on probation. During this month they are boarded and lodged at the expense of the hospital, but will receive no compensation should they leave or be discharged before the expiration of the

month, or be found incompetent by the lady superintendent. The medical superintendent of the hospital and lady superintendent (with concurrence of medical superintendent) will have full power to decide as to the fitness of the nurses for the work, and the propriety of retaining or dismissing them at the end of the month of trial. The same authority can discharge them in case of misconduct or inefficiency at any time. A vacation of two weeks is allowed each year. Pupils are required to wear the dress prescribed by the institution, and will be provided with two dresses each year and with caps and aprons. As the Toronto General Hospital is unsectarian, no regular religious services are connected with it, but all nurses are expected to attend morning prayers daily in the hospital, and to attend the place of worship they prefer once every Sunday. They will reside at the hospital and serve as nurses in the wards. In sickness, all pupils will be cared for gratuitously. The medical superintendent may send any pupil to act as nurse in any place in the Province, but no pupil shall be required to be absent from the hospital more than three months in any year. The hospital to pay the travelling expenses of the pupil, and all remuneration charged and received for her attendance shall belong to the hospital, the pupil not being entitled to extra payment for any such attendance, nor to receive any perquisite or gratuity without the sanction of the lady superintendent. *Training:* Those persons complying with the foregoing conditions will be accepted as pupils, by signing a written agreement to remain at the school for two years, and to conform to the rules of the hospital. The instruction includes:—1. The dressing of blisters, burns, sores, and wounds; the preparation and application of fomentations, poultices, and minor dressings. 2. Application of leeches, and subsequent treatment. 3. Administration of enemas. 4. Use of female catheter. 5. The best method of friction to the body and extremities. 6. Management of helpless patients; moving, changing, giving baths in bed, preventing bed sores, and managing position. 7. Bandaging, making bandages and rollers, and lining splints. 8. Making beds, and changing sheets while the patient is in bed. 9. That no part of the hospital is clean if it can be made cleaner. The pupils are taught to prepare food, together with drinks and stimulants for the sick; to understand the art of ventilation without chilling the patient, both in private houses and hospital wards, and all that pertains to night, in distinction from day nursing. To report to the physicians accurate observations of the state of the secretions, expectoration, pulse, skin, appetite, temperature of the body, intelligence (as delirium or stupor), breathing, sleeping, condition of wounds, eruptions, formation of matter, effect of diet, stimulants, or medicines, and to learn the management of convalescents. Instruction will be given by attending and resident physicians and surgeons at the bedside of the patients, and in various other ways, also, by the lady superintendent and head nurse. Lectures and demonstration will be given from time to time, and examinations held at stated periods. The pupils will pass through the different wards, serving and being taught, for one year. They will be supplied with board and lodging, and will be paid $6 per month. This sum, with their education, is considered a full equivalent for their services. At the expiration of one year, they will be promoted to such positions as they may be found capable of holding, and will be paid $9 per month. Arrangements will be made for pupils who may desire a special course of instruction in midwifery, to attend the Burnside Lying-in Hospital, after their first year of pupilage. When the full term of two years is completed, the nurses thus trained, after passing a final examination, will receive diplomas, certifying to their knowledge of nursing, their ability, and good character, and will then be in a position to choose their own field of labour either in hospitals, private families, or public institutions.

THE DRY SUTURE.—Dr. John H. Packard recommends this in closing long wounds. He uses strips of Seabury and Johnson's porous plaster two and a half inches wide and the length of the wound. These are applied on each side of the incision, and then the sides laced together, using the holes in the porous plaster.—*Phil. Med. Times.*

Simple Remedy for Sciatica.—Dr. Ebrard, physician to the Hospital of Nimes, publishes in the *Courrier Médical* this new method of treatment. For many years I have treated the pains of sciatica and other neuralgias without having recourse to any other electric battery than a smoothing-iron, which, along with vinegar, is to be found in every house. This is how they are employed: The iron is heated hot enough to vapourise the vinegar, and is wrapped up in some material, preferably woollen; it is then dipped in the vinegar and applied upon the painful part. The operation is repeated two or three times in the day. It rarely happens that the pain has not disappeared at the end of twenty-four hours. This action is easily understood; on account of its contact with the fire, the iron becomes magnetic, and if an acid be added while it is hot, electricity is produced, and the same effects are obtained as with an electric battery.

Clinical Value of the Thermometer in Abdominal Affections.—By Prof. Peter.—The physician may be called to a case of disease of the stomach; he finds no material proof of the existence of cancer, but he may feel intuitively that there is one. In such a case, the application of the thermometer is of real importance. Being called in consultation by my distinguished confrère, M. Leudet (de Rouen) to the case of a man 52 years of age, percussion of the epigastrium, practised *en dedolant*, showed certain points of dulness. Under these circumstances, I had recourse to the thermometer to clear up the obscurities of the diagnosis. In the epigastric depression the thermometer registered 37°·5 (99°·4 Fahr.); but it is known that the normal temperature of the epigastrium in the healthy individual is about 35°·5 (about 96° Fahr.). In painless atonic dyspepsias, the temperature remains unchanged. The result of my researches goes to show that the temperature in the vicinity of a cancerous lesion is elevated from 1° to 1°·5 (centigrade) above the normal. This is not due to phlegmasia but to irritation. The fact is, in my opinion, significant. In simple gastralgia, there may be elevation of temperature, but it is ephemeral, and only lasts as long as the pain continues. This is a fact which appears to me to be worthy of remark, and which is interesting because it enables us to comprehend how, even in cancer, a cauterization of the epigastrium, resorted to opportunely, may dissipate the hyperæmia; to say nothing of the important diagnostic deductions derivable from this means.—*La France Méd.*

Cold Bath in Delirium Tremens.—Dr. Féréol, of the *Hôpital Lariboisière*, lately records (*L'Union Médicale*) the successful treatment of a case of "acute febrile alcoholic delirium" by cold baths. The patient, a young man twenty-six years of age, entered the hospital on the 14th August "in a state of delirious excitation, which at night required the straight-jacket to be applied. The night was passed amidst cries, vociferations, furious agitation, and hallucinations of sight and hearing. Temperature very elevated, but impossible to place the thermometer; pulse very frequent. On the morning of the 15th, I prescribed three cold baths, to be given during the day, and a mixture containing 10 grammes of bromide of potassium. The first bath was followed by no amelioration, the agitation seemed even to augment. But, at the second, given two hours after the first, the patient grew calmer, and was scarcely replaced in bed when he fell into a sleep, lasting two hours; on awakening, he was given a draught, and a short time afterwards he again fell into a sleep, which lasted throughout the night up to 5 o'clock in the morning."

Births, Marriages, and Deaths.

BIRTHS.

In Bowmanville, on Jan. 26th, the wife of Dr. Beith, of a son.

On January 31st, at Guelph, the wife of Dr. Harkin of a daughter.

MARRIAGES.

On Jan. 21st, at Toronto, W. J. Wilson, M.D., of Stouffville, to Mary Ann O'Neil, of Toronto.

At St. Mary's, on Feb. 1st, J. J. Hall, M.D., to Mrs. Morphy.

At Napanee, on February 18th, Milton Ira Beeman, M.B, to Miss Lilian Hanault.

On January 22nd, Francis M. Howe, M.D., of Fordwich, Ont., to Mary A. McDowell, eldest daughter of the late A. C. McDowell, of Manitoba.

DEATHS.

At Cobourg, on Feb. 8th, William Wade, M.D.

On Wednesday, Feb. 5th, at 112 Bay St., Duncan Campbell, M.D., in the 67th year of his age.

THE

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U. OGDEN, M.D., *EDITOR.*

R. ZIMMERMAN, M.D., L.R.C.P., London, *171 Church Street Toronto, Corresponding Editor.*

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☞ **All Communications, Letters and Exchanges must be addressed to the Corresponding Editor.**

TORONTO, APRIL, 1879.

Selections: Medicine.

TREATMENT OF DELIRIUM TREMENS.

BY GEORGE W. BALFOUR, M.D. ST. AND.,
Physician to the Edinburgh Infirmary.

GENTLEMEN,—Having now had, in the ordinary course of our clinical rotation, for some little time under my care Ward 10, into which are admitted all maniacal and noisy cases, as well as those suffering from the effects of drink, and as the results obtained during that short time have been somewhat remarkable, I wish to make you acquainted with them; and also to guard you against a dangerous fallacy, which, to my astonishment, I have found to be still somewhat prevalent.

You are aware that the drink cases admitted into Ward 10, and usually classified under the heading of "delirium tremens," include every variety of alcoholic poisoning, from the excited, fidgety, and prostrate condition popularly known as "the horrors," up to the very worst type of delirium tremens, often ushered in by severe and repeated epileptic attacks, forming a true *status epilepticus precursor*. You all know, I dare say, that, up to a comparatively recent date, the production of sleep was, very properly, as I think, regarded as the most important part of the treatment of this disease, and that this was sought to be induced by most unjustifiable doses of narcotic poisons. Subsequently, chiefly owing to the writings of Dr. Ware, of Boston, delirium tremens came to be regarded as not in itself so dangerous as the means employed to cure it—to be looked on, in fact, as a disease, which might safely be left to itself, and which terminated naturally in from sixty to seventy-two hours. More recently still, modern chemical research having supplied us with safer and more active nervine sedatives, the production of sleep has again been recognized, not as a *sin qud non* in the sense of the former dogma that the patient must sleep or die, but as a very important and most efficacious means of cutting short the attack,—so safe and efficacious, indeed, that it seems almost a premium upon vice to promulgate it, though it is neither safe nor efficacious unless it is properly employed; this, however, has relation to the causation of the disease, of which I shall presently speak.

Twenty (now thirty) years ago the formula in use for delirium tremens cases in Ward 10 was, tincture of opium one drachm, tincture of hyoscyamus two drachms, common spirit (whisky) one to two ounces, given in a sufficient quantity to produce sleep. It seems impossible to account for the manner in which this most dangerous treatment was adhered to for years, except on the supposition that it was made to be less dangerous than it seems by that antagonism between opium and hyoscyamus which had been shown to exist by Mr. Benjamin Bell and others (more recently by Dr. Chevers and Professor Frazer). Be that as it may, there can be no reason to doubt that this treatment must have been most positively injurious in all but the most wary hands, too often substituting opium for alcoholic poisoning, and that it only maintained its ground because it was less fatal than the indiscriminate bloodletting which, as a treatment, immediately preceded it. And amid the many attempts every now and then made to revive the practice of bloodletting in inflammatory affections, it may serve to

strengthen the principles in which you have been trained to remember that arguments precisely similar to those made use of as to its efficacy in inflammation were formerly employed in favour of its use in delirium tremens —a disease which it only too often fatally cut short, yet one which is now-a-days rapidly and safely cured without it, though no one as yet has broached the theory that there is any change of type in this form of disease.

The treatment recommended by Mr. Jones, of Jersey, has never obtained any footing here. It consisted in administering half a fluid ounce of tincture of digitalis at once, and half of that dose, or two drachms, every two or three hours afterwards for twice or thrice. I have known many who preferred this treatment to that of opium ; I myself believe it to be less dangerous, but though I know that half a fluid ounce of tincture of digitalis is not necessarily a fatal dose, I cannot help thinking it to be a dangerous one. It contains very nearly double the quantity of the drug which old Withering used to give, and the symptoms he often produced are not less likely to conduce to the safety of a patient suffering from delirium tremens.

The treatment by large doses of cayenne pepper, recommended by Dr. Kinnear—scruple boluses repeated every two or three hours—was also never adopted here ; yet it was never dangerous in itself, and was often rapidly curative, as I myself have frequently had occasion to observe in private cases.

The expectant treatment, however, introduced by Dr. Ware, of Boston, was largely employed here, and gave rise to a free use of the dark and padded cells, which, I dare say, few of you have ever seen, and which are relics of a time when, as is but right, the treatment of lunacy was part of the daily duty of the physicians of the most complete and perfect teaching hospital of its day. Under this expectant method the patients undoubtedly recovered ; but they were a good while about it, and during the process they ran many risks of various kinds—risks to themselves from their own violence, besides risks from constitutional exhaustion, from exposure to cold, and all that in such cases may flow from that, including subsequent inflammatory attacks, &c. I have tried this system very freely, and can assure you that the various risks were not small, though, with careful watching the ultimate success was extremely gratifying.

Next followed the use of tartar emetic and ipecacuanha, as recommended by Dr. Preddie, of Edinburgh. I do not know that this treatment ever obtained any footing in this institution ; it was less injurious than the opiate treatment, more dangerous except in skilful hands than the expectant treatment, and not more successful. But, on the other hand, it was most useful in cutting short a debauch, a full emetic of tartarised antimony seldom failing to put a speedy end to the most prolonged debauch, while, as it can be easily administered in the drink taken, it even yet may prove a most useful and efficient adjunct in the treatment of such cases.

Chloroform has also been employed in the treatment of delirium tremens, but it has proved unreliable, and too often dangerous.

The introduction of the bromide of potassium into medical practice, and its recognition as a safe and reliable nervine sedative, ushered in a new era in the treatment of delirium tremens. Instead of waiting and watching through a tedious convalescence, during which the patient ran various risks of death, from twelve to twenty-four hours' treatment was enough to induce a sufficient amount of refreshing sleep to restore the patient to a rational condition and speedy convalescence. From a pretty considerable experience of this treatment, I can say that it only failed in very exceptional conditions, and in some of these failures the cure was completed by the subcutaneous injection of morphia ; while the few cases in which death occurred were in patients exhausted by primary disease or maltreatment, or affected by severe epilectic convulsions—a form of disease usually amenable to the bromide of potassium, but which, as a precursor of delirium tremens, too often proved intractable and fatal. Only in the very rarest cases was it found necessary to conjoin this treatment with the administration of stimulants, and these cases were always tedious and most unsatisfactory. On the other hand, several cases treated outside, ineffectually,

by the bromide of potassium accompanied with stimulants, were at once cured by the same remedy *minus* the stimulants. One of the most remarkable of these cases was sent in by a medical man, who seemed to think the case a very serious one. He anxiously inquired if I thought it possible that the patient, should he survive, would be well enough to be removed at the end of a fortnight, as his passage to America was taken, and his friends were anxious to get him away. He smiled incredulously when I told him if he called back next day he would find his patient either well or asleep, and fit to be removed at the end of a week. The result was, however, as predicted, and my friend is now a firm believer in the air of No. 10, though still sceptical as to the virtue of the bromide of potassium. The dose of the bromide was, however, large—half a drachm or more; and required to be frequently administered—every hour,—and that often till so much as ten or more doses were given before it took effect. In such cases this frequent repetition of the dose was always irksome and often troublesome, and the recent introduction of the hydrate of chloral was therefore welcomed as a possibly useful substitute. The first case of delirium tremens submitted to it was one of a fortnight's duration and of maniacal ferocity. He had had the bromide of potassium at home, and was sent in because it was found impossible to manage him, and his case was looked upon as most dangerous. Two doses of hydrate of chloral, of thirty grains each, with an interval of an hour between each dose, sufficed to induce refreshing sleep, from which the raving maniac awoke a rational man, requiring no further special treatment. Similar success has attended the chloral treatment in all the cases of delirium tremens which have been admitted to Ward 10 of late. In several severely maniacal cases a dose of forty-five grains has been administered with a result equally gratifying and surprising. In a case of puerperal mania one such dose sufficed to restore reason to the patient, at least so far as quietness and docility were concerned, though it completely failed to make her believe that she had ever given birth to a child.

So far, therefore, as our present experience is concerned, we seem to possess in hydrate of chloral a remedy which in all such cases, from the slightest to the most severe, acts rapidly, safely, and efficaciously—*cito, tuto, et jucunde*—and which seems to deprive indulgence in drink of all its horrors and nearly all its dangers. Unquestionably fatal cases must occasionally occur under this as well as under other modes of treatment, but the number of them must be much decreased, because, from the rapidity with which a cure is brought about, many dangerous risks are averted. Thus, we avoid all the risks arising from a long continuance of maniacal excitement, or from a suicidal state of mind, all risk from the exhaustion following persistent sleeplessness, or defective nutrition, the result of long-continued insufficiency of food, &c. The risks the patient actually runs are not now, as formerly, connected with the treatment, but with his previous state of health. Thus, if he has a fatty heart, or has been exhausted by long-continued debauchery, or if he is from any cause an epileptic, he may die suddenly during the attack. But if he is otherwise healthy, he is sure of a safe and speedy convalescence.

So much for the treatment of delirium tremens. The fallacy to which I promised to direct your attention is this—that delirium tremens does not arise from drinking, but from ceasing to drink. In regard to this matter I myself have no doubt, and my confidence is derived from two sources:—First, I have found that so long as you permit your patient to obtain drink just so long will his disease prove obstinate and intractable to treatment; while when you continue the treatment, minus the drink, the cure is rapidly obtained. Of this we have had many examples, and it is this which has gained Ward 10 its well-earned reputation. Secondly, by stopping a man in his drinking by means of an antimonial emetic, you may often save him from an impending attack of delirium tremens, but you will never bring on one. Having had repeated occasion to employ this treatment, I speak with perfect confidence as to its results.

P.S. (December, 1878.)—Ward 10, which used to be under the care of each of the infirmary physicians alternately for a period of

three months, is now placed under the care of one of the assistant-physicians, so that henceforth I am not likely to see so much of delirium tremens as heretofore. I wish, therefore, to record that my experience of its treatment by chloral during the last nine years has been most satisfactory. It has, however, been my experience that there are very few cases indeed which yield to a less dose than fifty grains, and a considerable number which require a good deal more; those cases requiring the largest doses being those ushered in by the *status epilepticus*, which chloral arrests as rapidly and safely as it does delirium tremens itself. But even in these cases I have never required to give more than 120 grains of Liebreich's chloral, in divided doses, and this dose, though large, is not a dangerous one. Richardson tells us that the dose of chloral is proportionate to the weight of the animal, that a human subject weighing from 120 to 140lb. is thrown into a deep sleep by a dose of ninety grains, and into a sleep that is dangerous by a dose of 140 grains. He finds also that an individual who has taken enough of chloral to be affected by it gets rid of it at the rate of seven grains an hour, so that though 144 grains given at once is a dangerous dose, yet twelve grains may be given every two hours for twelve times with perfect safety. From the irritated condition of the mucous lining of the stomach of a drunkard it is probable that the absorption of indigested fluids is not so rapid as usual; it is but fair, therefore, for that reason also, to allow a moderate interval between the doses, so as to avoid as far as possible any risk of giving more than enough. At the same time we must shun the opposite extreme of giving doses in themselves too small to have any decided effect, and which have any possible cumulative effect destroyed by too long an interval being permitted to elapse between the giving of each dose.

Acting upon the principles involved in the foregoing statements, I have for long been in the habit of treating cases of delirium tremens by giving forty grains of chloral hydrate every hour, for three times if necessary. Sometimes, but rarely, the first dose has been enough, most commonly two doses have been required, and it has only been in the very rarest instances that the third dose has been necessary. If the attack be ushered in by *status epilepticus*, I shorten the interval between the doses to half an hour, as in these cases time is of the utmost importance, and a large dose is sure to be required. Should the heart be feeble, I give each dose of chloral in half an ounce or an ounce of the infusion of digitalis; the chloral, unlike the bromide, has no tendency to weaken the heart's action, while, like chloroform, it seems to induce a more equable distribution of the blood, the digitalis toning the heart, and increasing the arterial blood-pressure. Even should pneumonia be present, though the risk to the patient is enormously increased, the treatment does not require to be in any way modified; it is still of the utmost importance to quiet the nervous system, and to keep up the heart's power; while, even *quoad* the inflammation, the treatment is not the worst that can be employed, and is indeed that with which I have for many years treated all my cases of pneumonia, as all my students know, with great relief to their sufferings, and with at least an average amount of success; this treatment being indeed an improved and modern analogue of the chloroform treatment which proved so successful in the hands of Varrentrap, myself, and others, three cases of which were published in *The Lancet* for April, 1869, by my then resident medical officer, Mr. Frank Hodges, F.R.C.S., now of Leicester.—*London Lancet.*

The Pathological Anatomy of Acne.—At the *Société de Biologie*, M. Cornil stated that "numerous micro-graphic researches had enabled him to establish the fact that the acne pustule results from primitive inflammation of the hair follicle, and that the neighbouring vessels, greatly developed, allowed serum to weep from them, which accumulated in the pustule by the phenomenon of diapedesis.—*Le Progrès Médical.*

A few grains of pulv-rhei, it is said prevent the nausea that often follows the administration of morphia. It should be given with the morphia.

ON CHRONIC BRIGHT'S DISEASE, AND ITS ESSENTIAL SYMPTOMS.

BY F. A. MAHOMED, M.D.,
Medical Registrar to Guy's Hospital.

* * * * *

The pulse of high pressure has been described under various titles, but none of them are satisfactory, because each describes one character, but no one title includes all; thus it is known as either the *hard*, *cord-like*, *persistent*, *long*, or *slow* pulse. Now, in enumerating all these forms, I have mentioned all the qualities of the high pressure pulse, but they are not all present in every case in which the condition occurs. The quality which is least constant is the one by which the pulse is most commonly described—the *hard* pulse; this description is, therefore, the most objectionable; while the most constant sign is that described by the last term—the *slow* pulse; and this term is the one least frequently employed, and is also that which is least generally understood.

Let us now take a pulse and examine it with a view to determining whether or not high pressure exists in the vessels. Having recognized the position of the artery, first pass the finger very lightly to and fro transversely across the wrist; if it appears to pass over a ridge each time it crosses the vessel, and this ridge is there at all times, irrespective of the pulsation of the artery (in other words, if the artery is constantly distended, during diastole as well as systole), then the pulse is called *persistent*, and this is one of the most constant and reliable symptoms of high pressure. It means that the arteries are constantly full; they cannot empty themselves as readily as they should do in health, and, remaining thus overfull, they offer an increased resistance to the cardiac contraction; for it is manifestly more difficult for the heart to empty itself into arteries which are already fairly full of blood than into arteries which are nearly empty. Thus the ventricle, having more work to do, takes a longer time to do it in; hence the *systole is prolonged*, and the systolic expansion of the pulse is also prolonged, and the tidal wave in the tracing is unduly sustained. This gives to the pulse the character which the old physicians described as the *pulsus tardus*, as opposed to the *pulsus celer*. (This was long ago pointed out by Dr. Burdon-Sanderson, and since then by others.) It is the most valuable and important sign of high pressure; it is the sensation of *slow* and *long* expansion which some pulses give to the finger, and the gradual way in which they subside, as opposed to the sudden subsidence and rapid falling away of the "quick" or "short" pulse. Types of the latter are seen in the "splashy" pulse of hæmorrhage or aortic regurgitation, while the pulse of Bright's disease is typical of the former. The two terms, *slow* and *long*, are synonymous; and the latter is more convenient, for the former is liable to be confused with or mistaken for *unfrequent*, as opposed to *frequent* —terms which, correctly speaking, should be used to denote the frequency of the beats per minute in place of quick and slow, which are commonly so used. These characters of the *long* and *short* pulse, and the use of the corresponding terms by the ancients, have been dwelt upon by Dr. Burdon-Sanderson in his classical little book on the sphygmograph, published in 1867. In that work he pleads much more powerfully than I can ever do, for what I seek to enforce to day; yet it appears to me that his teaching, vastly important as it is, has not received the attention it deserves; indeed, it is unknown to, or is forgotten by, the great majority of the profession. I find, indeed, that he there states a belief in the great doctrine I am seeking to prove—namely, that there exists a large class of people who constantly have *long* pulses, or pulses of high pressure, and that this is the indication of a diathesis which the old physicians—who, I cannot but think, were far keener observers than we generally give them credit for—recognized and treated. I feel sure that the doctrine of diathesis, or temperaments, will rise again, even in our generation, as a far more enlightened and complete conception than that which has been, or is at present, held concerning it, and that it will prove an invaluable guide in diagnosis and in treatment. In saying this, I am again echoing the words of that distinguished physiologist, but it is a lesson which the sphygmograph has taught me, as it taught him, and as it must

teach everyone who constantly employs it and seeks to profit by its use. To return to the point from which I have digressed, let me add that Marey has lately formulated a law which I believe from my own experience is true, and which both accounts for and explains the *long* pulse: Marey says that *the length of the ventricular systole is directly proportional to the arterial resistance;* in other words, if the arterial pressure is increased, the systolic expansion must be proportionately increased and the pulse become *long*.

The quality of *hardness*, when applied to the pulse, means its resistance to extinction by compression; it is not easily compressed by the finger. This quality is not always present in the pulse of high pressure, though it very generally is so. It indicates the force of the ventricular contraction. A strongly or excitedly acting heart produces a *hard* pulse; so also hypertrophy of the heart produces it. The *hard* pulse may therefore be a functional or an organic condition; but if the heart dilate, and its action becomes weak and failing, as it is very apt to do under high pressure, the pulse no longer remains *hard*, it may now appear *feeble* or *soft*, although *persistent* and *long* as before. A dilated heart may, however, give a covertly *hard* pulse—one, that is, which is not immediately recognized as such. It appears at first a feeble, easily compressed pulse, but if it be studied more carefully, it will be found that, behind its apparent feebleness, there remains a very considerable lifting power, which, though not discoverable at once, comes out by careful manipulation.

The *cord-like* pulse is said to be characteristic of high arterial pressure; under this term are included two distinct conditions. A pulse is said to be *cord-like* when it can be traced like a cord up the arm, rolled under the finger, and resembles to the touch the vas deferens. This character may be produced by mere *persistency* of the pulse, or overfulness of the vessels, although it appears as if due to an actual thickening and degeneration of the coats of the artery, so hard, knotted, and irregular does it feel; yet such a pulse can often be made to disappear by treatment. On the other hand, there is also a cord-like pulse which is really due to thickening and degeneration of the arteries. To distinguish between these two forms of *cord-like* pulse, the functional and organic, we must proceed as follows:—Place the index-finger of one hand upon the pulse, and having carefully observed it, compress the artery firmly against the radius by means of the other hand, immediately above the point of observation. Let the pressure be so complete as to effectually arrest the flow of blood; now carefully examine the empty artery with the index-finger previously employed; in most cases it will be no longer distinguishable, but if it still remains so, it is probably due to thickening of the vessels, and the case is one of general arterial disease. If this test be carefully employed, it will be found that thickened radials do not occur so frequently as is thought to be the case, at least not such thickening as can be recognized by the finger.

The pulse of high pressure may be either *large* or *small*. This quality depends chiefly on the relaxation or contraction of the arteries; if they are relaxed, the pulse will be large, and even have a tendency, perhaps, to slight dicrotism; but it will remain persistent and long, for although the arteries are relaxed, the resistance (which I believe exists in the capillaries) is still present, and the cardiac systole is still long, perhaps laboured, though not so much so, possibly, as before. Relaxation of arteries may give temporary relief to an overtaxed heart by permitting it to empty itself more completely for the time, but it does not appear to afford any permanent benefit. If, however the directions be all carried out with the most scrupulous care, it still occasionally happens that we remain in doubt, or fall into error, as to whether the pulse is one of high pressure or not. For example, a pulse frequently feels persistent when the arteries are relaxed and the pulse dicrotic—that is, when the very reverse condition to high pressure exists,—the fulness of the pulse and the large dicrotic expansion giving it sometimes even a sensation of *length* to the finger. It appears also that in some cases an unusually superficial vessel may give the character of persistence, especially if the pulse-wave be a large one.

Fortunately, however, we have a means of

checking our observations on the pulse, and this should be employed on all occasions. Dr. Sibson has pointed out the signs of high arterial pressure to be found in the heart—namely, a long or reduplicated first sound heard over the inter-ventricular septum, and an accentuated second. These variations in quality of the cardiac sounds appear to me to be of the utmost importance, and very frequently furnish most valuable information. The accentuation of the second sound is easily appreciated in any case in which the pulse is that of high pressure; but if this quality of the second sound is not present, it may generally be assumed that an error has been made with regard to to the pulse. With this, as with all other signs, fallacies arise; and it is not unfrequent to find a markedly accentuated second sound when the arterial pressure is low. I think I have more particularly noticed this to occur during the convalescence from acute rheumatism, and it is, of course, present in all cases in which the pulmonary circulation is impeded; in the latter cases it is well known to be due to accentuation of the sound produced by the closure of the pulmonary instead of the aortic valves, and probably it is due to this cause also in the other cases in which it is heard accentuated when the arterial pressure is low, though how this high pulmonary pressure is brought about it is not so easy to say.—*London Lancet.*

New Means of Preventing Cantharidal Cystitis.—M. Guyot Dannecy, Chief Pharmacist to the Bordeaux Hospitals, recommends substituting for the precaution of powdering blisters (vesicatories) over with camphor, that of incorporating with them a certain quantity of carbonate or bicarbonate of soda. He makes a mixture of equal parts of carbonate of soda and powdered cantharides, and spreads this mixture over the vesicating plaster, then he presses it strongly with the palm of the hand in order that the powder may remain adherent to the plaster, and lastly he covers the whole over with oiled silk. These vesicatories produce their effect as rapidly and as surely as one made simply with the powdered cantharides without any addition; and the trial made of it for a number of years in the Bordeaux Hospitals seems to demonstrate that this addition is a better preventive than camphor, of the accidents so often observed on the part of the bladder after the application of blisters, whether camphorated or not.—*Lyon Médical.*

TREATMEMT OF LUMBAGO.

BY ALFRED STILLE, M.D.

The treatment of the acute form of lumbago is very simple and very effective. Perhaps the best treatment at first is the application of scarifying cups to the muscle, or muscles affected, to be followed immediately by narcotic fomentations in the shape of a bag of hops soaked in hot water, hot vinegar, or alcohol and applied directly over the scarified parts. There are various stimulating and anodyne liniments which are really excellent in their way—such as turpentine, ammonia, camphor, etc. If opiates are to be employed they should be administered early in the course of the attack. The best form in which to administer opium is in the shape of Dover's powder. This may be given in ten grain doses. It is usually very efficient in affording relief to the pain and at the same time is very likely to produce copious diaphoresis. Where a rapid effect is desired the opium must be given hypodermically in the shape of morphia.

In most of the cases of lumbago which are encountered in private practice the patient will be found to object seriously to the use of scarifying cups unless all other remedies are found to be in vain. In fact, you will most of you find in time that the use of this most excellent remedy must be limited to hospital and dispensary cases. Where scarfying cups cannot be employed the best treatment is that by morphia hypodermically, and Dover's powder by the mouth. (In the University Hospital the great pain accompanying lumbago is at once and very often permanently stopped by the hypodermic injection into the affected muscle of a solution containing one-eightieth of a grain of atropia and one-eighth of a grain of morphia. Great care being always had in the administration of morphia and atropia to nursing women, as belladonna is the most powerful antigalactagogue known, and as too large doses of morphia not infrequently affect the child through its mother's milk.—Rep.)

Another most valuable drug in the treatment of lumbago is the iodide of potassium which would seem to be clinically proven to have a peculiarly beneficial influence over rheumatism of the lumbar region—more influence over this

form of rheumatism in fact than over any other. Dr. Graves, of Dublin, is the first one reported to have made use of iodide of potassium in lumbago and he tried its effects upon his own person. He found that in doses of from five to ten grains given every three or four hours, its effects were truly wonderful.

This clinical fact—I refer to the peculiar influence of the iodide of potassium upon rheumatism of the lumbar muscles—is very difficult of explanation, but it is undoubtedly true. The iodide has been tried in the treatment of muscular rheumatism of other parts of the body and its effects in such cases have been found to be not by any means so immediately successful.

In the chronic form of lumbago the condition is one of great obstinacy and is very difficult to treat. Such cases are very apt to persist in disappointing your hopes of cure. The most useful class of remedies here are of course the various forms of counter-irritants, such as blisters, sinapisms, the actual cautery, etc., etc. Thoroughly and conscientiously applied local friction and *massage* may do good in some instances where counter-irritants have signally failed.

Of all remedies, however, for chronic lumbago, I am accustomed to rely most upon the influence of tepid water upon the affected parts. The action of water, though slow, is a very permanent one. The water may be applied either in the shape of wet compresses kept in constant contact with the part, or you may use a douche and allow a stream of water to fall steadily upon the rheumatic muscles for some time from a height of from eight to ten feet. This use of water does great good in all forms of muscular rheumatism no matter where located. After the treatment by douche, or by wet compresses, the parts should be briskly rubbed with a coarse cloth or a skin brush, and then covered with cotton, or wool, or a piece of India-rubber cloth.

I have occasionally derived very advantageous and rapid results from the use of a metallic brush, rubbing the affected part briskly with it. This rubbing acts of course as an electric stimulus, and always gives immediate, if not permanent relief, though my experience has been that the use of the electric brush afforded permanent as well as immediate relief.

Very often I advise tying a cloth over the lumbar muscles and ironing them thoroughly, two or three times a day, and then following up the ironing with the application of some stimulating liniment.

If a person is subject to attacks of lumbago he should of course protect the parts by wearing constantly a Burgundy pitch plaster, or perhaps better still, a plaster that has lately been patented—I refer to the various makes of porous plaster. These plaster acts in two ways, first by protecting, and secondly by affording constant mechanical support to the affected muscles.

I think that I have already pointed out to you the most important remedial measures generally employed, but before closing I must not forget to tell you that guaiacum sometimes does great good. So, too, with regard to mezereum. Sulphur also is occasionally used with much benefit in the shape of sulphur baths, or sulphur water by the douche. Many recommended highly the continuous use of sulphur waters internally, or again, sulphur powder may be quilted in between two cloths and these kept in constant contact with the loins.

The treatment of chronic lumbago, if it is to be at all successful, must be constantly changed.

Dr. Stillé then speaks of rheumatism of the deltoid, muscles of the scalp, abdomen, eye, diaphragm, &c., all of which he treats in essentially the same way as lumbago.

The treatment of all these local forms of rheumatism is in general essentially the same as that for lumbago.—*Hospital Gazette.*

Extract of Malt of the Trommer Extract of Malt Co., Fremont, Ohio.—We find that this extract converts starch into glucose and dextrine rapidly, and in large quantity. In flavour it is excellent, and we have, therefore, no hesitation in praising it highly. Malt extract seems to be steadily increasing in favour for diseases involving impaired nutrition; but its preparation requires great care, as it is easy in making it, to destroy its activity for starch converter, and so render it nearly useless.—*London Lancet.*

Surgery.

NOTES ON PHTHIRIASIS.

BY L. DUNCAN BULKLEY, A.M., M.D.

The presence of lice is a far more frequent cause of irritation, and consequent lesion, of the skin than is commonly supposed, and must ever be borne in mind by the physician even when practising "among the best families." As is well known, there are three varieties found, affecting severally the head, the body, and the pubis and axillæ: the treatment is, of course, entirely local, and differs somewhat according to the locality of the parasite; we will, therefore, speak separately of phthiriasis capitis, phthiriasis corporis, and phthiriasis pubis.

Among the poor my almost constant treatment for lice in the head is kerosene oil, which not only operates as a destructive agent to the insects, but acts very kindly upon the artificial eruption, which is sometimes observed in great severity among the lower classes, where a large part of the scalp is often found to be covered with exuding surfaces. My method of using the oil is as follows: The ordinary kerosene, which is found in every family for use in lamps, is poured on the head freely, and well rubbed in. At bedtime another similar application is made, and in the morning, on rising, a third, the head being kept in the meantime covered with a cloth. After the scalp has thus soaked the kerosene oil for twenty-four hours, it is thoroughly washed with soap and water, and a small amount of weak ammoniated mercury or oxide of zinc ointment is applied to any existing sores, or a subsequent anointing with cod-liver oil affords admirable results. This single application of the kerosene oil for twenty-four hours effectually destroys not only every louse, but penetrates the ova or "nits," and they will be found loosened from their attachments, and even if left on the hairs they will not hatch out. I never order the hair to be cut even in the very worst cases; where the hairs are matted together with filth and exudation, the oil penetrates and softens all, and among hundreds of cases thus treated I have never seen it fail, whilst cheapness and safety, as compared with washes of bichloride of mercury, etc., especially recommend it.

The coverings for the head must also be treated or a new infection may take place; these I order to be placed in the oven of a range or stove, upon a board, and to be thoroughly baked for at least two hours.

Although the idea of applying the oil to the head of those in better classes of society may seem repulsive, I have employed this treatment in a number of cases in private practice and with the same results. The end is accomplished so surely and so quickly that patients submit to the disagreeable odor for the time (in them it may be counteracted afterwards by the essential oils, as bergamot, lavender, or rose, in washes or pomades,) while there is no other remedy with which I am acquainted which will with such certainty destroy the nits.

If the oil is objected to for its odor, or for other reasons, we have in the infusion of staves-acre, the seeds of the delphinium staphisagria, a cleanly and efficient remedy; but this requires a longer application, and, I believe does not affect the nits, which must afterwards be patiently picked and combed out; the destruction of the nits is assisted materially by the frequent use of a wash of alcohol and aromatic vinegar or aromatic spirits of ammonia, in equal parts, diluted if necessary. When there are but few lice an ammoniated mercury ointment (gr. xx—xxx ad ℥i) will suffice, or of powdered staves-acre seeds (℥i ad ℥iv); this latter will be much stronger if the ointment is melted and the powder added while hot.

Phthiriasis corporis, or lice on the body, may be speedily removed by absolute cleanliness and a proper treatment of the clothing. It is well known that the ova of this variety are deposited on the clothing; the undergarments, therefore, should be thoroughly boiled or baked, and clean ones, which have been thus treated, put on immediately after a bath. Among the poor I very commonly give a wash of carbolic acid and caustic potash after the following formula: ℞ Acidi carbolici. ʒii, Potass. caustic., ʒi, Aquæ, ℥iv., M, the potash to be dissolved in the water, and to be added slowly to the carbolic acid, in a mortar, with friction. This is an admirable anti-pruritic, while at the same time the carbolic acid assists in driving off the insects.

Where they can be employed, alkaline baths are of great service in relieving the pruritus which often remains after the removal of the lice.

Phthiriasis pubis refers rather to the variety of the parasite than to the region occupied, for the same round, crab-like insect may be observed on the hairs of the pubis, chest, axillæ, eyelashes and eyebrows, and even in the beard. The condition often passes unrecognized for a length of time, and unless pretty carefully sought for the animals will not be seen: they are found, as is well known, firmly attached to the hairs at their very exit from the follicle, and present rather the appearance of a minute crust or scab than of a living creature. Occasionally nits or ova are found on the hairs in abundance, but always very near their attached extremity.

Thus much is said in regard to the features of the disease because unless they are well borne in mind the parasite will not be reached. In vain is it simply to take baths and change and treat the underclothing, the crab-louse remains firmly attached, and is only gotten rid of by measures which reach it at its seat. The most common application is the ordinary mercurial ointment well rubbed in, but cases of salivation are continually occurring from this treatment, and other measures equally efficacious should be used. My usual remedy is the ointment of ammoniated mercury, either in full strength or once or twice diluted; if circumstances permit, kerosene thoroughly applied acts more speedily and surely than any other remedy: it should be well rubbed on with a cloth several times daily for one or two days. Stavesacre or sabadilla in powder or ointment, or a tincture or infusion of cocculus Indicus, are common prescriptions for this state. Turpeth mineral, twenty to thirty grains to the ounce, is a safe and efficient parasiticide. Where the lice exist in many places sulphur vapor baths are of service, but do not reach the nits. Occasionally cases with the crab-louse will prove very rebellious, and can only be overcome by continuous treatment for some time; the reason of this is that the nits resist the destructive agents, the new lice are continually hatched out, again deposit their nits, and so keep up the infection.—*Archives of Dematology.*

WOUND TREATMENT.

BY SAMPSON GAMGEE, F.R.S.E.

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By the courtesy of the Council of the Midland Medical Society, the students of this school were privileged to hear the deeply thoughtful and richly instructive address which Prof. Lister lately delivered here. His title, you will remember was "On the Healing of Wounds without Antiseptic Treatment." I shall only recall to you one passage which I took down *verbatim*, as my distinguished friend and old fellow-student was endeavouring to explain some of the published results of my practice. He did not question the reported recoveries after wounds into joints, and amputations under dry and infrequent dressing, rest, and pressure. Here is the pith of his answer—"that the healthy living tissues have the power of preventing the development of bacteria in their vicinity." This admission goes a very long way towards solving the question at issue. Since the great majority of wounds, whether inflicted by accident or by the surgeon's knife, are in healthy tissues, the development of bacteria need not be feared. Life resists putrefaction. Administer economically, preserve and utilise the resources of life, and you will have the benefit of its power in your surgical work. You will secure nutrition and repair, and, under the circumstances mentioned, have very little need to wage a war of extermination against atmospheric dust. But all wounds are not into healthy tissues—to wit, an incision into a joint filled with pus, an opening into a psoas abscess, or an empyema. It is in these cases that the argument of the germ-theory is full of suggestiveness; it is in these cases, not improbably, that a special triumph will be reserved for Professor Lister's treatment. If so, the triumph will be a grand and glorious one. I for one shall most heartily congratulate my distinguished friend, if experience prove the superiority of his plan of treatment in the exceptional pathological conditions just referred to. But for the great mass of surgical cases, for the treatment of wounds in every-day life and in the work-shop, at the pit's mouth and on the battle-field, the requisite knowledge is old

and sound. Much of that knowledge has never been sufficiently appreciated; no small part of it has been forgotten. The work of collecting and digesting scattered information, of applying a combination of therapeutic resources, separately valuable, and collectively most powerful for good, is an investigation at once deep and intricate; it demands no less learning than practical skill, and can only be successfully mastered by the combined energies of a number of men. Let anyone read Liston and Syme, living teachers of the other day, in the very first rank of historic surgeons; then let him think of the present discussion on wound treatment. They thought water dressing of recent wounds perfection; many of us look upon it, as I do, as an abomination. Treating of sprains, Liston said, "Avoid such compression as may interfere with swelling from effusion, which is *a salutary process, and should be encouraged, and not repressed.*" We say compress, and you will have no effusion, which is a pathological process to be discouraged and repressed, whether the swelling attend a sprain or a compound fracture, whether it be bloody or inflammatory, beneath an unbroken skin or associated with a wound. Are these truths or errors? *Experientia docet.* Let me repeat to you my favourite quotation from the inexhaustible treasure-house of the old French Academy of Surgery: "*L'Académie n'aime pas les systèmes.*" Theories and systems are what you have to avoid. Facts and their strict interpretation are what we have to search after. It is in this search that we are engaged. It is in this search that all those surgeons who are diligently working out the problem of wound treatment are destined to find a reward which cannot fail to redound to the honour of our art and to the good of our race.—*London Lancet.*

Capillary Varicosity of the Leg.—The next is a very important case, especially taken in connection with the preceding. This woman also has on her leg a lesion which I think almost any observer, from the appearances which it presents, would at first sight certainly pronounce syphilitic. It forms, therefore, one of those remarkable exceptions which we meet with in occasional instances, and to which almost every general rule is subject. On making a careful examination here, it is found that the superficial veins of the whole limb are in a marked varicose condition, and this patch upon the leg, so far from being of syphilitic origin, is simply the result of the same varicosity affecting the capillaries of the part. The brownish discolorations grouped together, which under ordinary circumstances would be regarded as characteristic of the stainings left by a tubercular syphiloderm, are here undoubtedly due merely to disintegration of the red corpuscles of the blood which has followed the rupture of the vessels. On the other limb we find the same marked varicose condition of the veins, and also similar patches above as well as below the knee, which might easily be taken as evidence of the syphilitic nature of the case. But she has not had syphilis; these stainings have never been preceded by any other lesion; they have long remained in their present condtition, and are certainly not due to syphilis. I have seen several of these cases. The lesion is not described in the books.—*Dr. Bulkley in Phil. Med. Times.*

L'Union Médicale.

Treatment of Constipation.—(Thomson.) If constipation result from deficient secretion in the small intestine, we increase the quantity of intestinal fluid by making the patient drink much more at his meals than he is in the habit of doing. Besides, we make him take in the morning before breakfast a glass of water containing in solution one drachm of the sulphate of magnesia, and one grain of the sulphate of quinine. A notable effect is produced after 8 to 15 days of this treatment. In old persons, and in those of sedentary habits, constipation is ordinarily due to defective innervation of the small intestine. In these cases we should be careful not to advise copious draughts, which only weaken the digestive power of the stomach and destroy the appetite. We prescribe, in the morning on rising, a hip bath, with water as fresh as the patient can bear, or sponging of the spinal region and abdomen with fresh water, or a rain-douche to the abdominal region. If it be defective innervation of the large intestine which determines the constipation, we unload the rectum from time to time by means of cold enemata, and then restore the innervation by means of hypodermic injections of strychnine.

Midwifery.

[Translated for the CANADIAN JOURNAL OF MEDICAL SCIENCE.]

Hôpital, St. Louis.—M. S. Duplay.

CYSTS OF THE BROAD LIGAMENT (PAROVARIAN CYSTS.)

GENTLEMEN,—I shall take for the subject of the present lecture the patient occupying bed No. 69, in the ward *Sainte-Marthe*. This young girl, 23 years of age, is not married, has never had children nor a miscarriage. She became regular at 14 years of age, since that time her courses have been sometimes accompanied by lumbar and abdominal pains. Four years ago she observed that her belly was increasing in size. This augmentation advanced slowly, and, so to speak, insensibly, but for the last year it has remained stationary. During all this period of its development the patient has not experienced the slightest pain, and her health has remained excellent throughout. On admission we found the abdomen pretty large. Its general outline presented nothing characteristic; its form might suggest an ovarian cyst, but there is not that prominence in front which is usually observed in cysts of the ovary. The belly is rounded, slightly prominent in the flanks. Absolute dullness is found upon percussion, except in the region of the upper demi-circumference of the abdomen, and the extreme parts of the flanks. Moreover—an important character—this dullness is fixed and undergoes no modification no matter what position the patient may assume. Along with this dullness there is found perfect fluctuation, transmitted in all directions under the slightest percussion. The tumour presents a resilience, an elasticity, alike in all its parts except in two points at its upper extremity where it is a little less depressible. It is movable upon the deep parts, and may be displaced from above downwards and from right to left. If the hand be applied to the abdomen during full inspiration there is not found that alternate elevation and depression which is impressed upon tumours connected with organs which are in contact with the diaphragm, such as the liver and the spleen. On the other hand, vaginal exploration very evidently establishes rather close connections between the tumour and the internal genital organs. In the first place movements impressed upon it are very readily transmitted to the uterus. Moreover, the cervix is carried very high up, and the uterus is displaced and compressed against the concavity of the sacrum. It is a remarkable fact that a tumour of such dimensions should give rise to but very trifling functional disturbances. It has not determined any of those phenomena of compression of the rectum or bladder or lower limbs which are so frequently met with in the various abdominal tumours, and particularly in tumours of the uterus and ovaries. The general condition is excellent, and the various functions of the economy are absolutely unaffected. Lastly, the catamenia are quite regular, and mensturation has occurred since her admission.

We are evidently concerned with a liquid collection; but where is it located? Is it in the peritoneum; or is it an encysted collection? It is very easy, I think, to show that it is a cyst and not an ascites. You know, in fact, that in ascites the fluid, obedient only to the law of gravitation, always occupies a dependent situation in the abdomen, which varies with the position of the patient. The intestine, of a less specific gravity, floats on the surface. If then the patient be lying horizontally, on the back for example, you will find dullness in the hypogastrium and flanks, and on the other hand resonance in the epigastric and umbilical regions. But if the position of the patient be changed, if she be placed on one side, for example, the whole of that side will be dull, and the other side will present an exaggerated resonance. In our patient I have already remarked to you that dullness is found over almost the whole abdomen, and that this dull region does not change with the position of the patient. In her case, therefore, we are concerned with a cyst and not an ascites.

With what variety of cyst then have we to do? I shall not undertake to lay down here the differential diagnosis of all abdominal tumours; such a study would carry us much too far. I shall proceed more generally, and shall insist especially upon certain points which I wish to bring into relief. In the first place we

shall eliminate altogether the different kinds of solid tumours, because we know our patient's is a fluctuating one. We shall also pass over in silence those tumours which are at once solid and fluid; such tumours are not fluctuating in all directions as is the one under observation. We shall also readily distinguish from it tumours of the upper part of the abdomen, such as cysts of the liver and spleen; for these tumours are adherent to the diaphragm and follow all its movements. Renal cysts are very rare; they are preceded by functional disturbances of the kidneys. Lastly, an important characteristic: Such cysts are located upon one side of the abdomen, or, if they occupy the whole of it, they have first appeared upon one side. I shall only mention as a curiosity encysted dropsy of the peritoneum. This affection is extremely rare, and it is almost impossible to diagnose it if you have not witnessed the beginning and the evolution of the malady. We must therefore refer our patient's tumour to the utero-ovarian system, more especially as I have already pointed out to you its connexions with the uterus.

We can now proceed still farther in narrowing the diagnosis. Let us take up, in the first place, uterine cysts, or fibrocystic tumours. These tumours are irregular, being formed of several sacs. But, in the present case, we have to do with a very regular tumour, resilient and fluctuating in all directions. Moreover, the vaginal touch has not discovered any abnormal projection from the uterus itself. We can not rest satisfied with a supposition of pregnancy, although in all cases of abdominal tumour the possibility of such an occurrence should ever be present to the mind. But here this differentiation is unnecessary. In the first place we know that the patient has been regular within a few days. Moreover, the tumour is so liquid, and its walls are so thin, that it in no respect recalls the characters of the gravid uterus. There remain, lastly, ovarian cysts. But it is now known that unilocular ovarian cysts are extremely rare, so much so, in fact, that some authors absolutely deny their existence. In a recent communication to the *Académie de Médecine* upon the indications and contraindications of ovariotomy, I laid it down as an absolute rule to make an exploratory puncture in all cases of encysted tumour of the abdomen. This puncture will, as a first result, afford you information as to the nature of the cystic fluid, and you will, before long, see this point acquire the highest importance in view alike of prognosis and of treatment. I have, therefore, practised in our patient a puncture which gave issue to eleven litres of a fluid whose characters differ from those of true ovarian cysts. The fluid contained in these latter cysts is thick and thready, like a solution of gum or of silicate of potash; it is variously coloured, sometimes red, sometimes yellow, sometimes green. In our patient, on the contrary, the fluid was limpid, transparent, and clear as crystal. So from these characters alone I felt justified in affirming that it was not a true ovarian cyst, but a cyst developed in the vicinity of the ovary. We know, in fact, that there exists a variety of cysts situated in the broad ligament, and formed from the *debris* of the Wolffian body. Not long ago these cysts were scarcely known clinically; but in the last few years Spencer Wells, in England, and Panas, in France, have directed the attention of surgeons to them, and have insisted upon the benignity of their prognosis and the facility of their cure. I therefore deem it of utility to point out to you briefly both the origin and the mode of development of these cysts. You are aware that the genito urinary organs are developed at the expense of the Wolffian body which is at first situated within the abdomen along side of the vertebral column, and part of which presides over the development of the kidney; whilst the other part gives origin to the testicle in man, and to the ovary in woman. In the latter, after the development of the ovary, this body atrophies, and is thenceforth represented merely by its extremely shrunken excretory canal, and by its flexuous secretory canaliculi. Under this wasted form it constitutes what has been termed the body of Rosenmüller, or the *parovarium*. Roseumüller's body is situated in the broad ligaments, and is made up of a certain number of very fine canaliculi which are all directed towards a principal canal in which they terminate. In conseqence of new transformations this principal canal becomes short-

ened, and the different canaliculi it receives all converge towards the same point. These latter have a very fine, rather irregular calibre; here and there they present swellings, elsewhere they are, on the other hand, constricted. You will readily perceive that such a disposition is eminently favourable to the development of cysts; and in point of fact you often meet at autopsies with cysts having such an origin. But these cysts may acquire much greater dimensions. It is very frequently extremely difficult to distinguish them from true ovarian cysts. I believe, however, it is possible to make this differential diagnosis by taking into account the following facts: in the first place, cysts of the broad ligament are in general formed of a single sac; but we now know that true ovarian cysts are almost always, if not always, multilocular. In general, the form of the belly is not the same in the two varieties. In cysts of the parovarium the belly is rounded even into the flanks; in ovarian cysts, properly so called, it is rather prominent above the pubes. Cysts of the broad ligament have closer connexions with the uterus, which is often displaced and pushed back against the sacrum. But it is especially exploratory puncture which will remove all doubts. In fact, as I have already said, the fluid presents very different characters in the two varieties. In cysts of the parovarium the fluid is colourless, of a perfect fluidity, and a clearness similar to that of crystal. Chemical analysis reveals in it no trace of albumen, or absolutely insignificant quantities. But you know that true cysts of the ovary always contain considerable proportions of it. Lastly, in these latter cysts the microscope reveals the presence of *Eléments figurés*, of special cells, which are the *cellulæ caliciformes*. In cysts of the parovarium on the contrary such are never met with. * * * * * * * Now as to prognosis and treatment. While on the one hand veritable ovarian cysts are amenable only to ovariotomy, parovarian cysts, on the contrary, will be cured by simple puncture, or by a series of successive punctures which may be followed up by iodized injections. I am myself not very far from believing that the majority of cysts cured by simple puncture followed by iodized injections were merely cysts of the parovariun. The prognosis therefore, of these cysts, is benign. * * * * *—*Le Progrès Médical.*

DANGER FROM WASHING OUT THE PUERPERAL UTERUS WITH DISINFECTANT SOLUTIONS.

In No. 14, sec. 313, and No. 16, sec. 341, of the *Centralblatt für Gynäkologie* are two contributions, by Kustner and Fritsch respectively, drawing attention to the possible risks that may follow from the too free employment of disinfectants in the form of injections into the cavity of the puerperal uterus. The symptoms were those of acute poisoning. In Küstner's case, which subsequently proved fatal, and in which the section showed that the introduction of the catheter had in no way injured the uterus, there were suddenly developed unconsciousness, contraction of pupils, rapid respiration (40 per minute), and the pulse ran up to 148, being weak and scarcely perceptible. Clonic spasms seized the arms, the head was thrown backwards, the jaws were clenched, and the small muscles of the face were convulsed, and a clammy sweat covered the patient. In 10 to 15 minutes she improved considerably. In half an hour afterwards the patient vomited black matter, and the urine, removed by catheter an hour afterwards, was perfectly black. The solution used on this occasion was one of acid to twenty of water. Fritsch records three cases of dangerous symptoms arising from washing out the uterus with disinfectants immediately after delivery. In one of these cases the disinfectant used was salicylic acid, in the other two carbolic acid. In all the cases, sudden collapse, unconsciousness, and extremely rapid pulse were observed. In the cases in which carbolic acid was employed, there followed the characteristic coloration of the urine. All these ultimately recovered. In all three cases the uterus was ill-contracted. Both authors regard these accidents as due to rapid poisoning from the entrance of the disinfectant into the blood through the patulous sinuses of the badly-contracted uterus; and, while strongly in favour of disinfectant irrigation of the puerperal uterus in cases where there is reason to apprehend putrid absorption from the endometrium, recommend strongly that the injection should be performed with the greatest caution, and the avoidance of a forcible stream.—*Abstract.*

THE DILATATION OF THE CERVIX UTERI BY TANGLE TENTS.

This is the subject of an interesting article in No. 7 *Centralblatt für Gynäkologie* of this year, by Dr. B. S. Schultze, of Jena. The underlying principle of his procedure is the assumption that for safe dilatation the tangle tent must never come in contact with a raw wound surface. But, besides this, Dr. Schultze takes the strictest antiseptic precaution that the conditions of the operation allow of. To gain the end in view, namely, safe dilatation of the cervix, Schultze employs flexible copper sounds, of varying thickness, by which he ascertains the exact size and curvature of the cervical cavity. Having settled these points, a tangle tent, corresponding in thickness with the sound, which just passes the cervical cavity, is immersed for one or two minutes in boiling water, and being thus rendered flexible, the same curvature is given to it as that of the sound, which has been previously adapted to the cavity of the uterus. On cooling, the tent retains the curvature thus communicated to it, and after steeping it in a $\frac{3}{1000}$ solution of carbolic acid, it is introduced through a speculum, the cervix being meanwhile held down by an assistant with a hook or vulsellum. If a drop of blood is seen coming from the cervix during any of these processes, the operation is to be postponed for at least twenty-four hours. The patient is to be kept strictly at rest during the whole time that the tent is dilating, and the strictest care is to be taken in the removal of the distended tent that no injury is caused to the cervix. The vagina and cervical canal ought to be then carefully washed out with a $\frac{3}{1000}$ solution of carbolic acid. By these precautionary measures, the author states that he has been able, in several hundreds of cases, to dilate the cervix without any accident, and maintains that if his method is followed the usual contraindications to dilatation of the cervix can be very largely dispensed with. He holds that, according to his experience, chronic metritis, chronic perimetritis, and parametritis, even when the resulting catarrh is inconsiderable, are very beneficially influenced by repeated dilatation and subsequent washing out with carbolic acid. In a number of cases of enlargement of the uterus from chronic inflammation, Schultze was able to demonstrate by actual measurement diminution in size to have resulted from this treatment. These precautions seem to us worthy of consideration at the present time, when the attention of gynæcologists is so largely directed towards dilatation of the cervix as an aid in the treatment of uterine affections.—*Abstract.*

Warm Fomentations to the Head in Cases of Uterine Hemorrhage.—Dr. Koehler (*Allg. Med. Céntral-Zeitung*, No. 1, 1879) states that he has for the last seven years, in cases of uterine hemorrhage, applied warm fomentations to the head to prevent anæmia of the brain, and also to the heart. Hot sand-bags are also very efficient, and the patients often will bear sand which is so hot that it can scarcely be touched by the hand. As soon as the fomentation or bag has been applied, consciousness is restored; the pulse grows stronger; the patient herself states that she feels better, that the ringing in the ears has ceased, and that she likes the application. As soon as it becomes cooler, she wishes it to be renewed. Dr. Koehler has, he says, saved patients even in most dangerous cases of hemorrhage by this proceeding, by which the physician never loses time, as the fomentations may be watched and renewed by any one. This method has been found equally efficient in anæmia caused by epistaxis, hemorrhages produced by wounds, etc.

Exulcerative Syphilitic Hypertrophy of the Neck of the Uterus.—Dr. A. Martin states, that in about 48 per ct. of all cases in women, during the early secondary period of syphilis, the uterine neck hypertrophies sheds its epithelium, looks varnished, of a livid hue, and suppurates slightly without ulceration. There are no subjective symptoms of inflammatory disturbance affecting the utero-ovarian system. The malady comes on, on an average, 58 days after the appearance of a chancre, sometimes preceded by fever. It customarily co-exists with secondary hypertrophy of the tonsils, to which it is quite analogous. The secretions from the lesion are contagious but not auto-inoculable. Four or five weeks of internal treatment, cause its disappearance. Local treatment alone is of little or no value.—*Archives of Dermatology.*

Original Communications.

CHEYNE-STOKES RESPIRATION.

BY R. ZIMMERMAN, M.D., L.R.C.P. LONDON.

Read before the Canada Medical Association at Hamilton, Sept. 12th, 1878.

The literature of Cheyne-Stokes Respiration is so meagre, that I have thought it might interest the members of this association to report a case that occurred in my practice during the past year:

The patient, A. M., aged 55, by occupation a tailor, first came under my observation in July, 1876, when I attended him in an epileptic attack brought on by excessive drinking. He was a man of exceedingly plethoric habit, and had been a hard drinker of spirits all his life. He remarked to me at one time that he had been almost nursed on whisky. He stated that he had hip-joint disease when a child, which was cured with considerable deformity, but that since then he had been healthy up to the last few years, when his breathing became short. In April, 1877, I attended him for phlegmonous inflammation of the leg, which suppurated, and confined him to bed for five weeks. After recovering from this attack he returned to work and continued at work until January, 1878, though the dyspnœa due to emphysema of the lungs continued to increase in severity. At times he could not walk further than a few yards without resting. In spite of repeated warnings he continued to drink to excess. The illness which terminated fatally began in January, 1878, when he had a return of the inflammation in his leg, which, however, did not suppurate. The leg had continued more or less œdematous during the nine months preceding this, and latterly both legs were dropsical. He was now confined to his bed almost constantly, the dyspnœa increasing gradually to orthopnœa; the appetite failed, and the œdema of the lower extremities increased; cough troublesome, and he slept very badly. There was no cardiac murmur. Up to the time when the peculiarity in respiratory rhythm began, that is near the end of February, there was no albumen in the urine and no casts could be found; the secretion was not at any time in excess in quantity, and was usually high-coloured; bowels usually constipated. I may here remark that no treatment adopted appeared to have much effect. I succeeded at one time in reducing the œdema of the legs considerably by 20 grain doses of resin of copaiba, but the œdema returned and then the remedy failed; tonics, diuretics, and expectorants, such as iron digitalis, sweet spirits of nitre, bromide of potash, belladonna, strychnia, carbonate of ammonia, &c., were all tried, without more than temporary relief. About the end of February the right arm and hand became œdematous, the left not so; the respiration, which had all along been very laboured, assumed the character which has been called Cheyne-Stokes—Cheyne in 1818, and Stokes in 1846, being the first to describe it. This peculiarity in respiratory rhythm continued, sleeping or waking, with but one slight intermission, to the time of his death. The phenomena as observed were as follows: After a period of complete cessation of respiration the patient would begin to respire gradually, beginning with a low inspiration, then one more decided, and so on, increasing to a maximum, and then declining gradually until a state of complete apnœa would be produced, lasting, as a rule, eight to ten seconds, to be followed by a new ascending and descending series, and another period of apnœa. During the period of dyspnœa at its height the expirations were almost explosive in character, so violent was the action of the expiratory muscles. During apnœa he would lie quiet without moving. He did not suffer any pain, and appeared unconscious of any peculiarity in his dyspnœa. The following are the notes taken during the last three weeks of his life:

March 6th.—10.30 p.m. Resp. 24, pulse 104, a trace of albumen in the urine, no casts, sp. gr. 1020. The period of dyspnœa lasts fifteen seconds, during which the number of cardiac beats is 24. Apnœic period 10 seconds, cardiac beats 20. During one period of 20 seconds, dyspnœa occupied 12, apnœa 8.

March 8th.—8 a.m. Pulse 78. During period of dyspnœa, cardiac beats 10 in 10 seconds. In apnœa, 15 in 10 seconds. Less œdema of the arms. Periods of dyspnœa, resp. 9 in 15 seconds, followed by apnœic periods of 10 seconds.

March 11th.—10 p.m. Resp. 30. Pulse irregular 88 to 100. Dyspnœa lasts 15 seconds, apnœa at first only 4 or 5 seconds and after a few minutes' observation disappearing, shallow feeble respirations replacing it. During dyspnœa, pulse 25 in 15. Apnœa, at first, 9 in 5.

March 12th.—3.30 p.m. Dyspnœa present. Apnœa absent; but respirations, at times, barely perceptible; pulse, hitherto fairly strong, is weaker; œdema of legs less. At 9 p.m. Resp. 21, pulse 80. Dyspnœic period 7 to 9 in 13 seconds. Apnœic 7. Pulse, during 7 seconds of apnœa, 14. During 15 of dyspnœa, 19. He is weaker.

March 13th.—9.30 a.m. Resp., 30; pulse, 80; dyspnœa, 10 in 15 seconds; apnœa, 10; pulse in dyspnœa, 18 in 15; in apnœa, 17 in 10; œdema of hand and legs much the same; passes fair amount of water, and takes nourishment fairly well.

March 14th.—9 p.m. Resp., 24; pulse, 88; urine, 1020 trace of albumen; resp., 8 or 9 in 15, during dyspnœa; apnœa, 10; Pulse in dyspnœa 10 in 10; in apnœa, 15 in 10 seconds; œdema of the lungs, face puffy, bowels constipated.

March 15th.—11.30 a.m. Resp., 25-30; pulse, 80; resp., 10 in 15; apnœa, 10 seconds; pulse same as 14th; urœmic odor, less œdema of the legs, more of right arm, face puffy, was delirious during night. 8.30 p.m. Resp., 27; pulse, 86; urine scanty; resp., 9 in 15 seconds; apnœa 10. Pulse in dyspnœa, 18 in 15; in apnœa 19 in 10 seconds. Lungs very œdematous, face congested and puffy, is delirious at times, takes a fair amount of nourishment.

March 16th.—Weaker, drowsy, not delirious. Pulse, 84. Respiratory rhythm unchanged. At 7 p.m. Resp., 25; pulse, 80; urine scanty, is drowsy, very thirsty, takes less food. Resp. unaltered.

March 20.—Was better since last notes up to last night, when he was seized with acute pain in the bowels, became unconscious, and passed his fœces involuntarily, is weaker, extremities cold, much œdema of arms, speech at times incoherent, but no delirium, pulse weak, resp. same.

March 21st to 26th.—Rallied somewhat during the past five days, conscious, does not pass fœces involuntarily, urine scanty, takes a little nourishment, œdema increasing.

March 29th.—Has been getting weaker during the three days, and died comatose at 8 p.m., during my absence in the country.

I have not considered it necessary to detail the treatment, as it is unessential.

Post Mortem.—Vessels of scalp gorged with blood, and scalp very adherent. The meninges of the brain much congested, and the arteries very atheromatous; fluid in the ventricles; no other morbid appearances. The lungs very much congested and emphysematous. Heart greatly hypertrophied, especially the left ventricle, weight 23 ounces, valves healthy, ascending aorta atheromatous. The liver large, slightly fatty, with slight increase of interlobular connective tissue; surface, smooth; spleen, normal, save some congestion; small amount of fluid in the abdominal cavity; kidneys, large, weighing seven ounces each; surface, smooth; capsule, not adherent; cortical substance, somewhat diminished; vessels hypertrophied, slight increase of intertublar connective tissue, and of that around malpighian bodies; cells swollen and granular.

There appears to be some confusion in the minds of observers as to what really constitutes Cheyne-Stokes respiration. Many cases are recorded where it is said to have occurred in cerebral affections, that may have been merely cases of sighing respiration, which the Editor of the *London Lancet* regards as totally distinct; still, Stokes speaks of it as the more commonly occurring form. Cheyne, in 1818, writes as follows: "For several days his breathing was irregular, it would entirely cease for a quarter of a minute, then it would become perceptible, though very slow, then by degrees it became heaving and quick, and then it would gradually cease again. This revolution in the state of breathing, occupied about a minute, during which there were about thirty acts of respiration." In this case fatty disease of the heart was marked, while the valves were healthy, and the aorta was studded with steatomatous and earthy concretions. This condition closely coincides with what was found in my case. It was not until 1846 that Stokes drew general attention to the

peculiarities of the symptom, and attributed it to fatty heart, regarding it as only to be found in this condition, and followed in a few days by death. Soon, however, it was found that it was not confined to this disease. Dr. Hayden in his case, found the cardiac beats and pulse unaltered during the respiratory changes in rhythm and force; but Dr. Little and M. Biot found the cardiac pulsations increased in apnœa, and decreased in dyspnœa, as obtained in the case above given. Dr. Hayden attributes the phenomena to want of oxygen in the circulation and in the tissues Traube explains it by the accumulation of $C.O._2$ in the lungs, at first the pneumogastric nerves alone being excited, the $C.O._2$ continuing to accumulate in the arteries of the body; soon all the sentient nerves are excited, and the respiration becomes dyspnœic. This deep respiration eliminates the $C.O._2$, and the respiration becomes superficial when there is not sufficient $C.O._2$ to excite the sentient nerves of the periphery; finally there is no longer enough to excite the pulmonary nerves and apnœa supervenes. Filehne, of Erlangen, believes that by the accumulation of $C.O._2$ the activity of the vaso-motor centre is increased, but still not sufficient to excite the respiratory centre. The arterial contraction that comes on at the end of a pause causes a progressively increasing anæmia of the respiratory centre: this excitation causes respirations to be deeper and deeper until the blood becomes well oxygenated, when the vascular contraction ceases, and the anæmia of the respiratory centre, and the excitation to respiration ceases. Dr. Paul Cuffer, of Paris, in a pamphlet on "Alterations of the Blood in Urœmia, on the Pathogeny of Urœmic Accidents, and on Cheyne-Stokes respiration in Urœmia," published this year, investigates this subject clinicallly and experimentally. He observed seven cases in the Necker Hospital in 1876, and adds two that occurred in the Charity Hospital. All these patients had interstitial nephritis. Seven cases of Cheyne-Stokes respiration, out of nineteen of interstial nephritis, is certainly a large proportion, when we consider the rarity of its reported occurrence in the practice of others.

Cases I. and II. interstitial nephritis and mitral disease. Respiration, 14 in a minute, apnœa lasting 30 or 40 seconds, returning every 2 minutes. During apnœa cardiac action slower.

Case III. Aged 51. Renal disease, interstitial, from lead poisoning, cardiac hypertrophy. Period of apnœa 25 seconds.

Case IV. Aged 47. Cardiac and hepatic hypertrophy, chronic interstitial nephritis.

Cases V. and VI. Aged 62 and 70. In these cases the apnœa was not complete. Interstitial nephritis.

Case VII. Aged 49. Similar lesions to case 4.

Case VIII. Aged 55. Patient gouty, with a history of having had Cheyne-Stokes respiration *for six years;* in all the previous cases it occurred a few days before death, but not during coma in more than one.

Case IX. Aged 44. (Female). Is peculiar; patient was seized suddenly after a chill, with all the symptoms of interstitial nephritis, polyuria, urine clear, slight albumen, slight œdema, cardiac hypertrophy, bruit-de-galop, very rapidly followed by urœmia, troubles of vision without retinal lesion, headache, vomiting, pains in the joints without swelling, dyspnœa soon becoming intermittent. The case then proceeded as one of chronic interstitial nephritis without further symptoms of note. Cuffer attributes the nephritis to a chill causing vascular spasm, but gives no reasons for belief that there may not have been long antecedent renal trouble.

In the *London Lancet*, of March 31st, 1877, a case is reported of its occurrence in a case of amputation of the thigh following compound fracture; there was profound anæmia, and the man only lived 4 days. The heart was healthy, no mention of the kidneys. A peculiarity about this case was, that after the period of apnœa had lasted 6 or 8 seconds, it could be always arrested by pulling forward the tongue; this could not be done if the tongue was pulled forward earlier in the apnœa.

In the *London Lancet*, March 10th, 1877, R. Wharry, M.B., reports four cases, two of valvular disease, fatal; one of scarlet fever and acute nephritis in a child—in this there was no apnœa but merely respiration ascending and descending in rhythm, fatal. The fourth case

occurred in a typhoid fever patient; the case was severe. Cheyne-Stokes respiration appeared about the twenty-fourth day, and lasted four days. The patient recovered; no cardiac disease; condition of urine not mentioned.

From September 30th to October 28th, 1876, M. Biot watched a case of incompetency of aortic valves, with atheroma of the peripheral arteries, and gives comparative traces of pulse and respiration—ratio in dyspnœic and apnœic periods, (*Lyon Medical*, 50 and 51, 1876.) He is the first to record such a comparison. The details in all the cases, I have been able to find, are exceedingly meagre. In some cases the respiratory troubles were accompanied by rolling of the head, oscillation of the eyeballs, and at the commencement of apnœa movements of deglutiton, and changes in the pupils. In some cases it occurred only in the comatose period of uræmics in others, the intelligence did not appear affected. In some cases the heart is said to have been accelerated in the period of apnœa, others give it the reverse. The ages of the patients where given were 38, 44, 47, 49, 51, 55, 58, 62 and 70: only one case occurred in a female. In investigating this obscure symptom, one naturally looks to the respiratory and cardiac nerve centres for an explanation. Is it due to disease located there? or is it due to changes in the blood and blood vessels? Nothing indicating the former has been found. Physiologists teach us that respiration takes place in the tissues, and not in the lungs, that "le-besoin de respiration" depends on want of oxygen and is not due to the presence of $C.O._2$. The respiratory centres are excited to action directly by blood changes, and reflectorially by the sentient ends of other nerves. If Cheyne-Stokes respiration depends on blood poisoning, we have to determine what these poisons are, how they act, whether they only act in certain conditions of the system, and what those conditions are. Many more cases will have to be carefully observed and recorded to decide these questions. In animals, whose pneumogastric nerves have been divided, excitation of the central ends during the state of apnœa produces no respiratory movements, so long as the blood has been surcharged with oxygen, by previous excessive artificial respiration. The same current of electricity that tetanizes the diaphragm in the normal state has no effect when the blood is overarterialized. But if the blood be poor in oxygen its excitation tetanizes all the extra muscles at the time in action. Blood, surcharged with oxygen, causes a state of apnœa. As a conseqence of the previous dyspnœa, respiration is no longer necessary, and rest is required. If any of us breathe rapidly for several times in succession we require to cease breathing and rest. In most of the cases recorded the secreting organs were diseased, probably primarily, if we except those of brain lesions.

Cuffer injected urea into rabbits, without causing convulsions, respiratory changes, or changes in the blood; but when he injected creatine or carbonate of ammonia into the veins of dogs, the phenomena of Cheyne-Stokes respiration followed,—violently in the latter case, tranquilly in the former; and in both instances examination of the blood showed that the red corpuscles were greatly diminished in number, absorbed oxygen with difficulty, seemed inert, incapable of function,—paralysed, so to speak. The leucocytes were increased in number. He examined the blood of patients bled during uræmic coma, and found identical changes from a healthy standard. Cuffer also produced the phenomena of Cheyne-Stokes respiration experimentally without the use of any toxic agent, by performing tracheotomy on dogs that were, from agitation, previous to, and during the operation, breathing rapidly. The blood becoming hyperarterialized, soon the respirations became slower, and finally ceased, to be followed by a return of respiration. He states that he has observed similar phenomena after tracheotomy in an infant. In an animal that was tracheotomized, and had its lungs surcharged with air by artificial respiration, on ceasing artificial respiration a stage of apnœa followed; not so, however, when an irrespirable gas was used; on the contrary, there was continued dyspnœa. By another series of experiments Paul Cuffer shows that the artificial circulation through the brain, of blood, charged with $C.O._2$, causes convulsions and tumultuous respiration, and that the blood charged with oxygen causes the force and frequency of the respirations to diminish, but

not to cease; forcing a conclusion then, he says, "Respiration ceases when the oxygenization of the blood is sufficient, and consequently there is no need of respiration reproducing itself." Cuffer's experiments then, and his observations of cases of interstitial nephritis, would explain Cheyne-Stokes respiration as follows:

Deficient excretion, causing impure blood to circulate. Irritation of the vaso-motor nerves and spasm of the capillaries of the lungs, heart and general system, with hypertrophy of the heart. The circulation of the impure blood through the heart, lungs and respiratory, centres causes, by reflex action, dilatation of the peripheral vessels, and dyspnœa. This action would take place in the heart through its nervous supply reflected to the vaso-dilators, in the lungs by the pneumogastric terminal filaments; the tension being thus taken off the heart its action increases during the apnœa, and helps thereby to circulate the blood through the dilated vessels; apnœa lasts till the blood again becomes impure, and the dyspnœa is renewed. This may explain, perhaps, the change in the rythm, but it does not altogether explain the complete intermissions; as for this Cuffer says that it is the nature of spasm to be intermittent, and that overworked muscles, need rest. We know, too, that nature in her many wonderful acts of compensation for disease sometimes errs, and in this case, by too much action during the dyspnœa, may have oxygenated the blood too highly even to purify the blood poisoned during the previous stage of apnœa. Dr. Cuffer's explanations may do for some of his cases, but he does not attempt to tell us why, out of nineteen cases of interstitial nephritis under observation in one year, only seven had the rythm of respiration disturbed. Was there not vaso-motor spasm in all? This would be one important point to determine. Was there cardiac hypertrophy in all? A careful quantitative analysis of the urine in cases where it does occur, and a comparison with cases in which it does not, also would be of importance. We may thus perhaps discover what is the excrementitious matter retained that acts in this peculiar manner. Cardiographic and sphygmographic traces too are necessary.

Dr. Cuffer does not attempt to explain the occurrence of this Cheyne-Stokes respiration in other diseases, where, obviously, the conditions are vastly different from those of interstitial nephritis.

Since reading the above paper I have met with two cases of Cheyne-Stokes respiration. One, in a man over eighty years of age, who was suffering from emphysema and chronic bronchitis, and was moribund when I saw him; the other, a child eighteen months old, with pneumonia of the right lung. In this case the respiratory rythm was similar to the case related above; the periods of apnœa and dyspnœa being of about the same duration, but the Cheyne-Stokes respiration was not continuous; the pulse was 140; respiration varying from 48 to 60 per minute (when the Cheyne-Stokes respiration was not observed). This patient had many ymptoms pointing to tubercular meningitis, but recovered.

POLYPUS UTERI.

BY I. H. CAMERON, M.B.

Read before the Toronto Medical Society, May, 1878.

E. O'N———, aged 29. Married, (eleven years in June, 1878). Five children. Youngest, 2 years old. No miscarriages. No pathological history.

24th April, 1878. Presented herself at the Toronto Dispensary, saying that she had been flooding since the 17th of March last. It appeared, on enquiry, that her menstrual period was due on that day; that the flux appeared as usual, but instead of abating in 4 or 5 days, as was customary with her, its quantity progressively increased up to the time of application at the Dispensary. She had been previously quite regular, and knew of nothing to account for her unusual condition. It was elicited, that upon the day of the appearance of the flow, she had been washing, had lifted heavy tubs, and been engaged in other heavy work. Notwithstanding the occurrence of the discharge, she continued to pursue her ordinary avocations. She was ordered a mixture, containing ʒss. of fluid extract of ergot, and 15 grains of bromide of potassium to the dose, to be taken every 4 hours; and she was enjoined to observe the strictest rest.

8th May, 1878. (Wednesday.) Patient returned to say that she was no better. Affirmed that she had taken the medicine as directed, but admitted that, instead of resting, she had followed her daily pursuits as usual. Her mixture was ordered to be repeated; and she was directed to go to bed immediately, and remain there until the following Saturday, when she was to report, in person, if the flow had stopped, if not, she was to send word by messenger, and remain in bed.

11th May, 1878. (Saturday.) Sent word to say that she was worse, and appeared to loose more after each dose of medicine. Accompanied by Dr. Zimmerman, my associate at the Dispensary, I visited her at her home. She was found moving about the house, instead of resting. On vaginal examination, it appeared that the os uteri was soft and patulous, with torn extremities and rough granular edges. The anterior wall of cervix and body, was very much thickened and prominent, and felt as though a sessile polypus might be adherent to its internal wall. Pressure on the anterior portion of the body of the uterus, elicited pain.

The surroundings not being adapted for further examination, she was directed to remain in the recumbent position until Monday morning, when she was to present herself at the Dispensary for further examination. The dose of ergot was increased to ʒj, and that of bromide of potassium to ℈j, every 3 hours.

13th May, 1878. (Monday.) Patient reported herself at the Dispensary, still complaining that every dose of the medicine appeared to increase the flow. On introduction of the finger along the superior vaginal wall, it came in contact with a hard, round body, which appeared to be the fundus uteri, much anteverted, and the os was felt to be directed straight backwards towards the rectum. On introducing Stohrer's speculum, it was observed, that the vaginal walls and the anterior wall of the uterus, which came into view, were very much blanched. A slow stream of dark blood was seen issuing from the patulous os, and the os itself was seen to present those conditions diagnosed by the finger on the occasion of the first examination.

The uterine sound passed to a depth of 3½ inches, but did not indicate any noteworthy deviation from the normal axis.

The intra-uterine cavity was not thoroughly explored, because any impingement of the sound against the anterior or left lateral wall, caused the patient to cry out with pain. In view of the patient's circumstances, it was deemed advisable that she should go into the Hospital, and she was accordingly recommended to do so after resting at home for the remainder of the day. The blood passed was, for the first time, observed to be clotted. During the evening of the same day I was summoned to see the patient on account of pain; and upon reaching her about 11 p.m., I found that she had passed the accompanying tumour with much relief. The tumour would appear to have been extruded with its capsule, as the patient says it was covered with a tough membrane, which floated off when it was put in water, but which she did not preserve for me.

The flow, to[illegible], was very considerably diminished. She was directed to continue her medicine.

14th May, 1878. (Tuesday.) On visiting her this morning I found her very comfortable, complaining only of a slight pain in her left side, and with very little discharge. On digital examination the uterus was found rather higher in the pelvic cavity than previously; the tumour in the anterior lip of the os was much reduced, though it still considerably exceeded the posterior lip in size. The patient was directed to remain in bed and continue her medicine. During the evening I was again summoned to her bedside, on account of pain of a very severe bearing-down character. This was relieved by morphia.

15th May, 1878. (Wednesday.) This morning the pain was found to be very much mitigated, but the hæmorrhage had returned. No change on digital exploration.

16th May, 1878. (Thursday.) On introducing the finger this morning the fundus was found to be retroflexed, but was easily replaced with the sound. The anterior and left lateral wall could now be touched with the sound without inducing pain, and in moving the sound in the cavity, it appeared to slip over something, slightly resistant, which might be

another tumour; the depth of the cavity, however, as indicated by the sound to-day, is only 2½ inches. On introducing the speculum, the anterior lip of the os was observed not to be nearly so much engorged; but abundant florid, spongy granulations, bleeding on the slightest touch, covered both lips. The vaginal walls presented a less blanched appearance than on the previous occasion. On the supposition that the uterine cavity contained another tumour, and that dilation of the crevix would be necessary, the woman was again urged to go into the Hospital, which, upon the advice of Dr. Machell, Dr. A. H. Wright, and Dr. Smith, of Sebringville, who accompanied me, she at length consented to do. [It is to be hoped, that, at some future meeting, we shall have a further report of her case from our worthy Recording Secretary, Dr. Graham, under whose care she came.]

THE EXTERNAL TREATMENT OF SOME OF THE MORE COMMON FORMS OF SKIN DISEASE.

BY J. E. GRAHAM, M.D., L.R.C.P., LOND.

(Read before the Toronto Medical Society.)

(Concluded.)

I will now take up the local treatment of psoriasis. This disease consists essentially of a dry scaly eruption which begins in punctiform *nodules*. These gradually increase in size to form patches of various dimensions from that of a pin's head to the palm of the hand. For purposes of treatment the disease may be divided into—

1. The very mild form, psoriasis guttata, which very often requires no external treatment, being cured by the internal use of arsenic.

2. Psoriasis in children which is also treated principally by the internal administration of tonics, ol. morrhuæ and arsenic.

3. Psoriasis in the adult, which is accompanied by a considerable amount of congestion, and in which the disease has a tendency to spread.

4. Psoriasis, attended with very little congestion, and which has no great tendency to spread.

In that form accompanied by a considerable amount of congestion, one must avoid the use of stimulating applications. Many cases of psoriasis are made worse by a routine treatment. A case of this kind came under my notice the other day. The patient was covered from head to foot with psoriatic patches, and in which there was a good deal of congestion present. He had been under the tar treatment for four months and had been gradually getting worse during that time. The tar was too stimulating for this form of the disease. It would have been better to have used alkaline baths, followed by some mild astringent or mercurial ointment, and to trust more to the internal treatment for the cure. According to Tilbury Fox, when the maceration of the part with water is carried out, some oleaginous material must be afterwards applied to keep the skin soft and pliable. He treats this form of the disease when occurring in children in the following way: — Every night the patient should be put in an alkaline bath, containing two ounces soda bicarb. and two or three pounds of clarified size. He should remain in it fifteen or twenty minutes, and afterwards the patches should be thoroughly soaked in olive oil. After a time potassium sulphide may be added to the bath, half to three-fourths of an ounce.

The fourth form of disease, as I have given it, viz., that accompanied by little or no congestion may be sub-divided again into—1. That in which the disease is not extensive and there is little thickening of the skin. 2. That which is extensive, and where there is great thickening and induration. In the first form tarry preparations may be used, either in the form of ointment or in its purity. T. Fox recommends ol. olivæ ʒi, ol. juniper ʒij, adipis ʒi. To be applied night and morning. Some form of mercurial ointment may be used.

℞. Ung. hydrag. nit., ʒi; zinci oxid., ʒij; liq. plumbi, ʒss; acidi carbolici, gtt. ii; ol. olivæ, ʒi to ʒiss.

In the second variety, that is where much thickening is present a different plan of treatment must be adopted.

It is here that sapo viridis comes into prominence. The process adopted by Prof. Hebra, called the Schmeier Seifen Cyclus, is as follows: The patient is placed between blankets, with

woollen shirt and drawers. The soap is rubbed in twice a day for six days; once for the seventh, eighth, and ninth day. A bath being then given on the thirteenth or fourteenth. Now, notwithstanding the objections raised by English authors this is a wonderfully sucsessful mode of treatment for appropriate cases. I have seen almost every sign of the disease disappear with a single course of this kind. And often in those patients who had used other means for weeks and months. Internal remedies can of course be used at the same time. The great objection raised to this treatment is the loss of time, but in bad cases the patient will be quite ready to undergo this loss.

T. Fox is of opinion that the skin of English people is more tender than that of Germans, and one ought not to attempt such heroic plan of treatment. This may or may not be true. One ought at any rate to be careful in the selection of cases, and perhaps it is here that the English fail. I remember treating a case in the Toronto General Hospital in a simlar way to that mentioned. He was a resident of Muskoka, was of dark complexion, and with a skin not at all sensitive. The disease was almost universal. Do not think I ever saw a case in which the psoriatic spots covered the body more extensively. They, however, disappeared rapidly; and in almost four weeks he went home one might almost say cured. I saw the patient again this summer. There had been a very slight return of the disease. He had been nearly three years free from it.

In cases where the patches are more local, Fox recommends macerating with wet cloths. By placing the arms and legs successively in a wet pack for a few hours, each evening the patches of disease become thoroughly macerated.

In cases of psoriasis inveterata, when it is of long standing, the scales accumulate in layers, and the skin becomes very much indurated. In this condition it has been found a very difficult and slow process to remove the scales by ordinary maceration. They may, however, be removed by a sort of scraper, brought into use by Prof. Hebra. The use of this instrument is merely an adjunct to the other modes of treatment.

Before concluding this part of my subject, I must mention a mode of treatment recently introduced, viz., the external use of chrysophanic acid. It is applied in the form of ointment,—chrysophanic acid fifteen grains to an ounce of lard. A number of successful cases has been reported by Squire and Whiten. Squire, however, says:—"It is fair to say that the remedy does not invariably succeed: in some cases it fails altogether after a fair trial." It has the disadvantage of indelibly staining the clothing worn. Squire also recommends the use of a closely-fitting dress of india-rubber in the treatment of this disease.

In summing up, the principal points to be attended to in the external treatment of psoriasis, are:—1. In the congested form avoid the use of stimulating ointments. 2. When there is a very slight amount of congestion but a large amount of scales, the tarry preparations are to be recommended. 3. When there is a large amount of induration and thickening of the skin, with crusts and scales, the soap treatment with the use of baths will be found most successful.

Formularies.

For Eczema Squamosum.

Dr. Bulkley uses phosphoric acid externally and internally.

℞. Acid phosphor dil, glycerine, syrup, equal parts, to be applied 3 times a day, and twenty drops to be taken internally 3 times a day.

Formula for Salicylic Acid.

℞. Acid Salicylici	ʒi.
Spts. Aetheris Nitrici	ʒvj.
Sodæ Bicarbonatis	gr. lxx.
Spirit Lavandulæ Co	ʒii.
Aquæ	℥ii.
Syrupi Aurantii Corticis ad	ʒvj. M.

Sig. A teaspoonful every 3 or 4 hours. In preparing, mix the acid and the spirits of ether in a bottle, and then add the soda, and afterward the water, gradually, till effervescence ceases; and then the lavender and syrup.—*Naphey's Therap.*

Translations.

The Evolution and Metamorphosis of Tæniæ.

It has been generally admitted ever since the labours of Van Beneden and of Siebold that the complete evolution of the tænia from the state of hexacanthic embryo up to that of striped worm, cannot take place in the same animal. Thus the vesicular worm of an herbivora, such as the horse, must always be swallowed by a carnivora, such as the dog, in order to become transformed into the perfect tænia. But, according to recent researches of M. Mégnin, things do not occur thus as a matter of necessity. In a horse dead of peritonitis, this physiologist found in the intestine, alongside of a perforation in the form of a longitudinal slit, two sacs each about the size of a nut, and containing small flat worms of 6 to 8 millimetres in length. From the *ensemble* of the anatomical characters of these worms, M. Mégnin concluded that they were very young *tænia inermes* (tænia perfoliata of Gæze). Besides these two sacs filled with small tænia there was a third in which granular matter and echinococcus-hooklets were found. In a second horse, also dead of peritonitis, there was in the intestine a large sac containing older tænia, 6 to 7 centimetres in length, veritable adult specimens of *tænia perfoliata*. It results hence that the *tænia perfoliata* may in the herbivora follow the phases of its evolution. The same vesicular worm, the echinococcus, gives origin to two different adult forms according as it is swallowed by the horse (tænia perfoliata) or by the dog (tænia echinococcus.)—*Le Progrès Médical.*

Antispasmodic Potion.—(Hermaut.)

Essence of Peppermint.....	15 minines.
Alcohol (at 80°)	ʒjss.
Wine of Opium.....	ʒijss.
Sulphuric Ether	ʒvijss.

Mix.

Ten drops added to a tablespoonful of sweetened water will give extemporaneously a ʒss. antispasmodic draught, so that, in the country, the physician can always have at hand an antispasmodic ready prepared, and condensed into a small compass.—*L'Union Médicale.*

The Organic Alterations of the Nervous System Corresponding with Certain Intra-ocular Lesions.—(Bouchut.)

In affections of the brain and spinal cord the hyperæmia, together with œdema of the optic nerve and retina, indicates hyperæmia of the brain and meninges with œdema of the pia mater.

Papillary anæmia and tenuity of the retinal vessels indicate ischæmia of the brain.

Thromboses and stases of the retinal veins indicate thromboses of the sinuses and meningeal veins. This is observed in the terminal convulsions of diseases, and in tubercular meningitis; dilatation and flexuosities of the veins, with optic neuritis and varicosity of the retinal veins, indicate an intracranial compression interrupting the circulation through the brain. This is seen in acute hydrocephalus, in large cerebral hæmorrhages, in copious traumatic effusions, in tubercular meningitis, and in certain cranial tumours.

Retinal hæmorrhages, with papillary exudation, indicate strangulation of the papilla by partial meningo-encephalitis. Retinal hæmorrhages, with cutaneous hæmorrhages, indicate the hæmorrhagic diathesis or hæmophilia. Retinal hæmorrhages, surrounded by fatty patches, indicate diabetes or albuminuria.

Miliary aneurisms of the retinal arteries reveal miliary aneurisms of the brain. This is seen in certain cerebral hæmorrhages in old people, and in senile cerebral softening, atrophy or sclerosis of the papilla, with various troubles of motility and sensibility indicate chronic encephalitis environing a cerebral tumour, or disseminated sclerosis of the brain and cord. This last condition is observed towards the end of locomotor ataxia.

Tubercles of the choroid indicate tubercles of the brain, of the meninges, and of other organs. They are met with in tubercular meningitis, cerebral tuberculosis and general tuberculosis, &c. Pneumatosis of the retinal veins indicates that there is a similar pneumatosis of the meningeal veins. This is always met with, in all cases, a few minutes after death.—*Gazette des Hôpitaux.*

Beneficial Effects of Erysipelas.

We make the following excerpta from a lecture upon erysipèlas, by M. Hardy, of Paris, lately published in *L'Union Médicale*. "Lastly, in certain cases, far from constituting a serious affection, erysipelas is, on the contrary, a fortunate complication, capable of determining the cure of chronic diseases, which may have lasted for a long period of years. This is the case with erysipelas, complicating certain chronic skin diseases. At the *Hôpital St. Louis* I have frequently seen erysipelas supervene in patients suffering from ulcers, and I have never failed to observe to my students that this apparently grave complication was a favourable circumstance, which would tend to bring about a prompt recovery from the primary disease. In individuals affected with syphilitic ulcerations, broken down by poverty and cachexia, and in whom all specific remedies have been tried without success, cicatrization has thus been observed to occur as a sequence of an erysipelas, and to be complete in the course of a few days.

I have thus seen, in the case of a serpiginous ulcerating syphilide, an attack of erysipelas produce a cure in a week. It is especially, in cases of a special affection of the skin, remarkable for its tenacity, scrofulides of whatever variety, erythematous, tubercular or ulcerous, that erysipelas is seen to occur as a complication of the skin disease. Not only then does the erysipelas not present any harmful character, unless recourse be had to some ill-advised treatment, but on the other hand it is observed to become the point of departure of an amelioration, which had been previously vainly sought by the employment of rationally indicated means. I shall cite, in support of this opinion, the case of a patient who had been for a long time under treatment in our hands for an ulcerating lupus of the cheek, an erysipelas having occurred, the sore commenced to present a remarkable modification; and, two months afterwards, a new attack of erysipelas produced an almost complete cure of the ulceration; lastly, three months later, a third attack of erysipelas occurred and left behind it a definitive cicatrization."

Accessory Mammary Glands.

The hypertrophy of the "tubercles of Montgomery," in the areola around the nipple during pregnancy, has been long since observed. Smellie and Montgomery relied upon their existence as evidence of gestation, but subsequent observations have shewn that hypertrophy of them sometimes occurs in nulliparæ, as a result of various uterine affections, interstitial myomata, &c. The fact of the glands containing a secretion has also been for sometime known, and frequently observed. Bidlos and Morgagni have observed it as a limpid liquid; and Morgagni, Winslow, and Coralo, as a thick milk. It was suggested, when a milky fluid was observed to flow from these glands, that perhaps a galactopherous tubule had beeen diverted from its ordinary course towards the nipple and had opened into one of these glands; but the researches of M. Duval (1867), M. de Sinety (1877), and Dr. Pinard (1877), have served to manifest the error of this view, and elucidate the physiology of these glands. "They are of three kinds: Simple sebaceous glands, sebaceous glands divided into several lobes, and lastly (and this is the interesting part) true isolated mammary glands, forming both colostrum and perfect milk under the same influence as the principal gland." Dr. Pinard, lately presented to the *Société Anatomique* a work upon this subject, together with a specimen shewing sixteen of these hypertrophied papillæ very prominent upon the areola of one side, and twelve upon that of the other,—a very unusual number. The secretion was identical with that from the breast itself. The number of galactopherous tubules opening into the nipple itself in this case was eight on one side, and nine on the other. The child, in taking the breast, opens its mouth widely in order to secure the secretion from all these sources. Out of sixty women examined with a view to determine the average number of these tubercles in the areola, four was found to be the mean for each breast. In four out of the sixty they were absolutely wanting.

In the February No. *Dublin Journal of Medical Science*, there is recorded a case of tertiary syphilis, in which the whole anterior surface of the atlas was exfoliated and coughed up. The patient recovered.

THE CANADIAN
Journal of Medical Science,
A Monthly Journal of British and Foreign Medical Science, Criticism, and News.

TO CORRESPONDENTS.—*We shall be glad to receive from our friends everywhere, current medical news of general interest. Secretaries of County or Territorial medical associations will oblige by sending reports of the proceedings of their Associations to the corresponding editor.*

TORONTO, APRIL, 1879.

ATTENTION!

We wish to call the attention of our readers to page 90 of the March number of the Journal, as we are sure there are many who must have either neglected to read it, or else having read it, neglected to give it that serious consideration which the importance (to us) of the subject demanded.

THE ONTARIO MEDICAL COUNCIL AND BRITISH QUALIFICATIONS.

Dr. Baldwin of this city, a graduate of the University of Edinburgh, has compelled the Ontario Medical Council to place his name on the register without examination. This will for the present settle the vexed question as to the right of holders of British qualifications to register in Ontario. Several members of the Executive Committee have interviewed the Dominion Government with a view to obtaining such legislative enactments, Imperial or Colonial, as will prevent this precedent becoming established. We hope they will succeed in their efforts, until at least a reciprocity of registration is granted. Of course, by exacting a very high fee for registering British qualifications, graduates in Canada intending to obtain such qualifications may be deterred from evading the Council examinations, but we would much prefer to see a reciprocity established, and we look forward to the time when such use shall be made of our abundant facilities for clinical instruction as will render it unnecessary for our students to undergo the great expense of pursuing their clinical studies abroad before entering upon the practice of their profession. With more teaching at the bedside, and less lecturing in the class room, our schools should be able (and are able) to send out graduates with practical knowledge equal to that obtained at medical educational institutions in any country. At present, the Ontario Medical Council appears anxious to prevent students devoting much time to clinical and practical work, by compelling them to show that they have attended a far greater number of wearisome didactic lectures, than it is in the capacity of any student either to listen to attentively or digest advantageously. We have often referred to this absurdity, and trust that at the next meeting of the Council a move will be made to put an end to it, for we know that it causes students to be far more anxious to *cram* for the examinations than to obtain a thorough and practical knowledge of their profession.

LACTOPEPTINE.—This preparation, which is composed of pepsin, pancreatine, diastase (or vegetable ptyaline), lactic and hydrochloric acid, and sugar of milk, has already acquired an enviable reputation, both in this country and abroad, in treatment of many forms of dyspepsia and indigestive troubles in children. We have used it in a number of cases, and its use has, in our hands, been invariably followed by good results. Many practitioners use pepsin, but in this preparation we get not only the pepsin, but also several other substances of great, if not equal importance in aiding the digestive process. Not only do men like Loomis, Sayre, Percy, Packard, Meigs, Dawson, and Yandall recommend it, but the entire mass of the profession, so far as they have tried it, seem to approve of it as well.—*Exchange.*

HANCE BROS. & WHITE.—We have received from this firm samples of their absorbent cotton, which will be found of great service to surgeons and gynæcologists, as a clean and pure absorbent dressing. This firm also advertise an extract of ergot for hypodermic use. One grain of the extract is equal to five grains of ergot. It is freely soluble in distilled water. Hance Bros. & White's mustard leaves afford a ready method of applying counter-irritation on short notice. *Read their advertisement.*

PRESENTATION.—On Tuesday evening, Feb. 25th, Dr. Robert A. Pyne was presented with an address, a case of surgical instruments and several valuable medical works, by the officers and employes of the Toronto Asylum. The chair was occupied by Dr. Lett, who expressed the regret felt at Dr. Pyne's departure from the institution. Mr. Robert Blair made the presentation on behalf of those present. Dr. Pyne made a happy reply, and was followed by Dr. D. Clark and Mr. P. Trowem, who spoke in flattering terms of the valuable services rendered by the recipient.

Reviews of "Bryant's Surgery," "Green's Pathology and Morbid Anatomy," "Ashurst's Surgery," "Whittaker's Physiology," "Tyson on Cell Doctrine," and "Atthill on Diseases of Women," will appear in our May number. We have not had time to do them justice this month.

JOURNALISTIC.—We have received No. 1, Vol. I., of *L'Abeille Medicale Journal*, de l'Ecole de Medicine et de Chirurgic de Montreal, de l'Hôpital-Dieu, de la Maternite Ste. Pelagie et des Dispensaries. Redacteur-en-Chief, T. E. Dodet, d'Orsennens, M.D.

COLLEGE OF PHYSICIANS AND SURGEONS OF ONTARIO.—The Professional Examinations for 1879 will begin on the morning of Tuesday, April 8th, in the Convocation Hall, Toronto University. The next regular matriculation examination will be held in Toronto on April 15th and 16th.

CANADIANS IN ENGLAND.—W. H. Burton, M.B., James Robert Jones, M.B., and Rolph B. Leslie, M.D., graduates of Toronto University; and Paul Zotique Herbert, M.D., Edmund Graves Kittson, M.D., graduates of McGill College, Montreal, have been admitted Licentiates of the Royal College of Physicians, London. Arthur Dalziel Campbell has been admitted L.R.C.P., Edin., and L.R.C.S., Edin.

"So long as legislation is conducted and examinations regulated by those who are themselves entirely ignorant of obstetrics, reform is next to hopeless."—(*W. S. Playfair, M.D., F.R.C.P., London, Inaugural address at the Obstetrical Society, London.*)

Book Notices.

Transactions of the Medical Society of the State of Tennessee at its 45th Annual Meeting, 1878, Nashville.

A Case of Inflammatory Fungoid Neoplasm. By LOUIS A. DUHRING, M.D., Philadelphia: J. B. Lippincott & Co., 1879.

Transactions of the American Dermatological Association at the Second Annual Meeting, held at Saratoga, August, 1878. New York: D. Appleton & Co.

In Memoriam—Dr. Landon R. Longworth. An address read at the commencement exercises of the Medical College of Ohio, Feb. 28th, 1879. By F. FORCHEIMER, M.D., Cincinnati.

An Address presenting the Claims of the Medical Department. Read before a Council in the interests of Syracuse University, held at Syracuse, N. Y., Dec. 1878. By ALFRED MERCER, M.D.

Atthill on Diseases of Women. Third edition. Lindsay & Blakiston.

The Principles and Practice of Surgery. By JOHN ASHURST, jun., M.D. Second edition. Enlarged and thoroughly revised. Philadelphia: Henry C. Lea, 1878.

A Manual for the Practice of Surgery. By THOMAS BRYANT, F.R.C.S. Second American, from the third revised and enlarged English edition. Philadelphia: Henry C. Lea, 1879.

An Introduction to Pathology and Morbid Anatomy. By T. HENRY GREEN, M.D., London. Third American, from the fourth revised and enlarged English edition. Philadelphia: Henry C. Lea, 1878.

These will be reviewed in our May number.

Consumption, and its Treatment with the Hypophosphites. By J. A. MCARTHUR, M.D., (Harv).

This is a pamphlet of notes and extracts from books and periodicals, foreign and American, on the treatment of phthisis by the hypophosphites.

Obituaries.

The death of Edward Ledwich, F.R.C.S.I., is announced. By his death Mercer's Hospital, Dublin, loses two-thirds of its surgical staff within eleven days. Mr. Ledwich was one of the founders of the School of Medicine which bears his name; and, in conjunction with his brother Thomas, was author of the famous Ledwich anatomy.

John Macrolin, M.D., 4th February, 1879, æt. 74, Emeritus Professor of Medicine of Aberdeen, and, up to 1875, Dean of the Medical Faculty.

Benjamin F. McDowell, M.D., Dublin, Lecturer on Materia Medica at the Ledwich School of Medicine, a Member of the Council, R.C.S.I., and Surgeon to Mercer's Hospital, æt. 38.

Suddenly, on 6th February, at the age of 56, Professor Marie-Paul-Emile Chauffard. His death renders vacant the chair of General Pathology at the Paris Faculty created in 1831 for Broussais and subsequently occupied and adorned by Andral and Lasèque.

Jacob Bigelow, M.D., LL.D., of Boston, U.S., died on the 10th of January, æt. 91. He was early distinguished as a botanist, and published several botanical works. He formerly occupied the chairs of Materia Medica and of Clinical Medicine at Harvard. His son, Henry J. Bigelow, is the eminent Boston surgeon. "His character," says a contemporary, "is one which it is a pride to record, a pleasure to recall, a profit to imitate. Well saith Rome's greatest orator, 'Brief is the time, short is the space allotted to man upon earth; but the memory of a life nobly rendered is immortal."

ZYMATE.—Professor Tyndall is strongly in favour of quarantine; and he thereby shows himself a donkey, the great medical thunderer, the *Lancet*, thinks. Tyndall bases his advocacy of quarantine on the germ theory. This reminds us of the definition of *zymate*, which is, "*a supposed compound of an imaginary acid!*" Verily there could be no better commentary than this on the germ theory—that beautiful and delusive and specious and baneful *ignis fatuus* now leading hosts of honest and useful men away from clinical experiment, that almost sole source of medical truth. The germ theory, we incline to believe, is one of the wiles of the devil.—*Louisville Med. News.*

Miscellaneous.

The very unpleasant pungent odour of iodoform can be completely masked by oil of peppermint. For instance, iodoform 2·0, vaseline 30 0., rubbed up with six drops of oil of peppermint make an ointment with a pleasant aromatic scent.

OPIUM HABIT AND AMYL NITRITE.—Dr. Leyman has successfully used amyl nitrite in insomnia consequent upon suddenly discontinuing the opium habit. Two or three whiffs, the flushing of the face being the criterion, were usually sufficient, being followed by refreshing sleep.

"I do not dispute, as for many generations has been admitted, that antiseptics are of service in surgical practice; but they are accessories and not essentials. The essentials for successful wound treatment are—accurate coaptation, dry and infrequent dressing, uniform gentle pressure, and absolute rest."—(*Samson Gamgee, F.R.S.E., in London Lancet.*)

NITRO-GLYCERINE IN ANGINA PECTORIS.—Wm. Murrell, M.R.C.P., in the Lancet, recommends nitro-glycerine highly in angina pectoris. He begins with drop doses of the one-per-cent nitro-glycerine solution thrice daily, and increases it as the case may be. Fifteen-drop doses have sometimes produced unpleasant symptoms. The homeopathists, no doubt, give this medicine in "explosive vomiting."

EXTEMPORE FORMULA FOR AN ANTIDOTE TO ARSENIC.—Dr. James B. McCaw remarked that dialyzed iron is simply a peroxide of iron, and is exceedingly sensitive to oxygen. Hence, on slight exposure to the atmosphere (as when the bottle remains unstopped), it unites with the oxygen of the air, and the solid oxide of iron is formed. He suggests the following formula as one not generally known for an antidote to arsenic, and claims for it precedence over all others; first, because it forms the surest antidote, and secondly, because the agents are almost always accessible—even to the country doctor who carries saddle-bags: R. Muriate

tincture of iron, ʒj; bicarbonate of soda (or potash), ʒj; tepid water, teacupfull. Mix.—The sesqui-oxide of iron is immediately formed in a solution of chloride of sodium (common salt). Give this mixture almost *ad libitum*. It is a perfect antidote to arsenic.

Hypodermic Injection of Morphia.—Dr. H. Gibbons sums up, in the *Pacific Med. and Surg. Journal*, his views of the proper use of the hypodermic injection of morphia, as follows: 1. Avoid it in congestion and inflammatory conditions of the brain. 2. Avoid it in pulmonary congestion, and where dyspnea is not the result of spasm. 3. Avoid it in acute inflammatory affections of the heart and pericardium. 4. Avoid it in high febrile excitement. 5. Avoid puncturing a vein. 6. Avoid a deep puncture, unless there is a special purpose to be accomplished by depositing the narcotic deep in the tissues. 7. Introduce the liquid slowly and not by sudden projection. 8. Require the patient to lie down and remain quiet after the operation. I may add, it is the remedy, par excellence, for the paroxysm of spasmodic asthma from whatever cause.

Retention and Incontinence of Urine.—Retention may be due to congenital contraction of the meatus which requires surgical enlargement of the orifice (2) to phymosis, where the preputial orifice is very small, (3) to stone in the bladder. It is more difficult to find a stone in the bladder when distended with urine than empty. Great care is requisite in sounding a child. Incontinence is due (1) to rectal complaints (2) to a tight foreskin (3) to a small congenital meatus (4) to calculus impacted in the urethra; causes 3 and 4 are not usually sufficiently attended to. Stone impacted in the urethra may cause retention or incontinence according to its location. A stone so impacted does not cause so much pain and discomfort as might be imagined. Milk dieting and the use of belladonna in nocturnal and strychnia and iron in diurnal incontinence are indicated.—(*Mr. Teevan in British Med. Journal.*)

Silphium Cyrenaicum.—The *Allgem. Wiener Med. Zeitung*, No. 53, 1878, contains an article on a drug which seems to have been known many centuries ago, but which has only been analysed and officially acknowledged in our times. It is the silphium Cyrenaicum, prepared by Messrs Dérode and Deffes, chemists in Paris, which is said to be very efficient in phthisis, catarrh of the lungs, cough, etc. It does not suddenly put a stop to these affections; but it diminishes the irritation in the throat which causes the cough; it reduces the action of the heart and lowers the temperature, thereby enabling both the patient and the physician to dispense with narcotics, which after a certain time lose their power, or, what is still worse, cause permanent injury to the nervous system and the brain. It is given in different forms, as pills, tincture, syrup, and glycerine.

The Odour of Hair, from a Medico-legal view.—From the mere odour of a p air of hair it is easy, says M. Gallipe *(Soc. de Biol. Paris)*, to tell whether the hair has been cut from the living body or has been shed. Hair dealers who are accustomed to it, are never deceived. The fallen hair has a dull aspect imputable to disease, and it is worked with difficulty. It has, so to speak, no odour. The hair of the Chinese presents a characteristic musk odour which is not due to any cosmetic, for the odour persists after the hair has been washed in pot ash. Regarded by transmitted light, Chinese hair has a red reflection. They are polyhedric on section; they are thus called in commerce square (carrés). According to M. Gallipe the hairs of an hysterical patient at the approach of the attack assume a special odour, invariably the same. In the last place, M. Gallipe points out the electric condition of certain hairs, which throw off still more electricity on friction. M. Paul Bert observed that the red reflection of black hairs goes to support the theory that red is a variety of black. When the hair grows white from age, this commences at the point and not at the base, unless there has been disease of the hair follicle. M. Malassey had even seen zebra hairs. In such cases the hair is projected first white, then black, and then white. This is a phenomenon of growth.—*Le Progrès Médical.*

Vibrios and Carbolic Acid.—At the meeting of the Société de Chirurgie of Paris on 12th February, M. Maurice Perrin read a very important memoir upon the subject of the Listerian treatment of wounds, and contended that a great wrong was done to antiseptic surgery by making it synonymous with Listerism He questioned if Lister's was the best form of antiseptic dressing, and if the precautions which that surgeon took were not illusory. M. Perrin undertook a number of ingenious experiments to determine if the object of the carbolic acid pulverisations was attained: He placed certain fermentescible substances in vases: blood, milk, urine and a decoction of barley. These substances were placed beneath bell-jars containing different atmospheres. The air of some was taken from a hospital ward; that of others from out of doors. In a third category, lastly, pulverised carbolic acid was introduced by means of Championnière's apparatus. Well then, some days afterwards these fermentescible substances were submitted to the microscope; they all contained nomads, vibrios, and bacteria dead or living, those whose air had been scrupulously carbolised equally with those which had been in contact with the nosocomial atmosphere. The carbolic spray is therefore insufficient; it is incapable of "killing on the wing" those germs whose ulterior development gives rise to the decomposition of liquids.

A New Eye Bandage.—In certain affections of the eye, particularly in iritis, irido-choroiditis, keratitis, etc., emollient applications are often found very serviceable. It is, however, not quite easy to prevent the latter from rapidly becoming dry, and therefore useless, while at the same time the patient is generally compelled to pay constant attention to them, and unable to attend to business. Dr. Maurel, surgeon in the French navy, has contrived an apparatus which removes these drawbacks, and which in its improved form, suggested by Dr. Maréchal, we place before our readers. It consists of a band of india-rubber intended to pass around the head and to be fastened by buttons. The centre of this band carries a frame in which is placed a watchglass removable at pleasure, and held in its place by a rubber band. A small piece of linen, consisting of four to eight layers stitched together, is first placed upon the eye, then a piece of sponge which, when wetted, measures at one edge $\frac{5}{8}$ inch across, at the other end $\frac{1}{4}$ inch, is saturated with the lotion and placed on top of the linen, narrow edge downwards, and finally the eye bandage is applied more or less firmly, according as it may be required. The upper edge of the sponge is to be in contact with the upper part of the orbit, so that the patient may be enabled to occasionally moisten it with the lotion without removing the bandage. The glass in front of the sponge, which is covered with moisture partly from the sponge, partly from confined vapors, permits the patient to ascertain the condition of moisture in the sponge. The apparatus gives so little trouble that, if only one eye is affected, the patient may, if necessary, even attend to his regular business, and need not be confined to the house.—*Bull. Gén de Thérap.*, November, 1878.

APPOINTMENTS.

Hugh Ross, of the Village of Brigden, Esquire, M.D., to be an Associate Coroner in and for the County of Lambton.

David William Ferrier, of the Village of Brougham, Esquire, M.D., to be an Associate Coroner in and for the County of Ontario.

Drs. Mullen and O'Neil have been elected attending physicians to the Hamilton City Hospital; Dr. Macdonald has been appointed consulting physician.

Robert Clinton Young, M.D., to be an Associate Coroner in and for the County of Kent.

Births, Marriages, and Deaths.

BIRTHS.

On March 11th, the wife of L. H. Evans, Esq., M.D., 152 Spadina Avenue, Toronto, of a daughter.

At 50 Duke Street, on March 1st, the wife of Wm. Oldright, M.A., M.D., of a son.

DEATHS.

At Toronto, on March 12th, Helen Archibald, sister of Dr. Charles Archibald.

On February 26th, Margaret Zoe, infant daughter of Dr. Constantinides.

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(See Transactions of American Medical Association, for 1876, page 176.)

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THE

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☞ All Communications, Letters and Exchanges must be addressed to the Corresponding Editor.

TORONTO, MAY, 1879.

Selections: Medicine.

ON CHRONIC BRIGHT'S DISEASE, AND ITS ESSENTIAL SYMPTOMS.

BY F. A. MAHOMED, M.D.

My first and main contention, as I have already stated, is that high pressure exists as a constant condition in the circulation of some individuals, and that this condition is a symptom of a certain constitution or diathesis, and indicates certain well-defined tendencies to disease. For this diathesis no name at present exists; it might perhaps very properly be termed Bright's diathesis, inasmuch as it tends to produce the disease bearing his name. Exception may perhaps be taken to the use of the word diathesis; it is considered by some an inaccurate word, without definite meaning. Perhaps no more exact definition of the nature of a diathesis can be given at present than to say that it implies a certain habit or tendency towards wrong-doing of a particular kind, by either blood, tissues, or organs; and it would appear that if we include blood among the tissues we should be nearly correct in limiting these diseased tendencies to certain tissues. Much confusion appears to exist in the minds of many between *diatheses* and *temperaments.* These two terms have completely distinct meanings, and it is important to distinguish clearly between them. The former may be regarded as a pathological expression implying certain tendencies towards disease; the latter as a physiological one, describing certain habits of the body in health, or modes of nutrition. Unfortunately, some of the former conditions are synonymous with some of the latter, and thus great confusion has arisen. True, *temperaments* are of very old date, and doubtless took origin in old and exploded medical superstitions; yet many think, and I believe rightly, that under the name of certain temperaments may be grouped certain classes among individuals, the individuals of each class having many similarities of development and nutrition, both physical and mental, as well perhaps as certain similar tendencies towards disease. On the other hand, *diatheses* apply wholly to tendencies towards disease in individuals in whom the disease may or may not have manifested itself. A diathesis may be either inherited or acquired; those best known are the gouty, rheumatic, nervous, lymphatic or tubercular, cancerous, and perhaps syphilitic. To these I would add the "high pressure," or Bright's diathesis. All these diseases are characterized by groups of minor disorders, produced by their local manifestations. They are not diseases with only one set of symptoms, or affecting only one organ, like pneumonia, gastric catarrh, or nephritis, but they imprint their own peculiar features on the local diseases which they produce. That there are such conditions as these I suppose few would deny. Their relations to temperaments it would be out of place to discuss here.

Overwhelming proof of the existence of this high pressure diathesis can be readily obtained by anyone who cares to investigate the matter with the sphygmograph; all that I ask is that it should not be denied without such an investigation. People who are subjects of this diathesis frequently belong to gouty families, or have themselves suffered from symptoms of

that disease; in others it may be acquired, and frequently results from lead or alcohol-poisoning, or takes its rise in pregnancy or scarlatina. In these cases of acquired poison the disease commences frequently in an acute form. Its tendency to become acute is in direct ratio to the acuteness of the poisoning. In yet other cases there is no distinct poisoning to be traced; it would rather appear to result from forms of indigestion and mal-assimilation. These individuals often have certain characteristics when in health. The chief are as follows:—Habitual constipation; some forms of dyspepsia; often signs of imperfect circulation, such as cold hands and feet, not unfrequently palpitation; sometimes shortness of breath on exertion. Their skins are often thick, of velvet-like softness, and very white. These characters of the skin appear to me to be frequent, but by no means constant, signs of the diathesis; Cullen's observation on the thick skin of gout is quoted by Sir Thomas Watson. The symptom of high pressure occurs very early in life; I cannot say how early. I may note in passing that the pulse of a healthy child is of higher pressure, on account of better arterial tone, than that of the average adult. It exhibits what may be considered the normal standard of pressure, while the average adult pulse is below the normal standard, which is only seen in particularly healthy individuals, except in those of the high-pressure diathesis, in whom the pressure rises considerably beyond the normal.

Let it be clearly understood, the existence of this abnormally high pressure does not necessarily mean disease, but only a tendency towards disease. It is a *functional* condition, not necessarily a permanent one, though it is generally more or less so in these individuals. These persons appear to pass on through life pretty much as others do, and generally do not suffer from their high pressure except in their petty ailments upon which it imprints itself; these mostly belong to one type, and are generally very greatly relieved by a purge and a little dieting. In other words, their arterial pressure rises at these periods and calls for treatment. After these little attacks their pressure often falls and remains low for a time; gradually, however, it again commences to rise, attains too great a height, and they have another breakdown. These breakdowns may be of more or less severity and frequency, according as the diathesis is more or less strongly marked; perhaps they consist of only a little "out-of-sortishness," sometimes severe headaches, often hemicranial, menorrhagias in females, epistaxis in males, temporary albuminurias or hæmatinurias, palpitations, breathlessness, sleeplessness, or the reverse, loss of memory, various neurosal or mental disorders, severe dyspepsias, constipation, or some such troubles; if more severe they may take the form of an attack of Bright's disease, or of an attack of bronchitis. But the attack passes off, and things continue much as before. As age advances the enemy gains accessions of strength; perhaps the mode of life assists him—good living and alcoholic beverages make good his position, or head work, mental anxiety, hurried meals, constant excitement, inappropriate or badly cooked food, or any other of the common but undesirable circumstances of everyday life, tend to intensify the existing condition, or, if not previously present, perhaps to produce it. Now under this greatly increased arterial pressure, hearts begin to hypertrophy and arteries to thicken; what has previously been a functional condition tends to become more of the nature of an organic one. Breakdowns are now more dangerous, they happen much as before, but more serious ones begin to appear. The individual has now passed forty, perhaps fifty years of age; his lungs begin to degenerate and become emphysematous; he has a cough in the winter time, and gradually drops into a condition of chronic bronchitis; his right heart dilates, and his condition becomes more or less mixed in the aspect it presents to us; but by his pulse you will know him. Or again his symptoms take another line: his heart fails him, it can no longer perform the high pressure work demanded of it, it therefore fails and dilates; the individual falls into a bad way; a mitral murmur appears; his pulse becomes weak and irregular, though still *persistent*, and so he will remain till he dies or is relieved by a timely reduction of pressure, which allows his heart to recover, and sets him on his legs again.

These cases are generally regarded as ordinary cases of mitral (or sometimes aortic) disease, *but no valvular disease is usually present.*

In another case the heart may not dilate severely; its hypertrophy, with some amount of dilatation, causes more or less trouble; perhaps he comes under observation for some functional disorder caused by it—one of those exacerbations previously noticed; a little albumen may now be found in the urine, the hypertrophied heart and thickened vessels may be recognized, perhaps some hæmorrhages seen in his retina, and he is immediately claimed as a case of chronic Bright's disease. The kidney may have a catarrh and the albumen increase in quantity in the urine, and some dropsy may appear. In other cases the whole stress of the disease seems to fall on the kidney, and it presents the aspect of acute Bright's disease. This terminates the life of many, as the table in the previous paper clearly indicates.

Yet another class of individuals fail through the arteries. These, I am inclined to think, are more especially the gouty and syphilitic ones. Atheroma is their great enemy; it may attack their aorta or large vessels so badly that they get aneurism, and fall victims to this disease. More commonly it causes general aortitis deformans, and creeping from the vessel on to the valves, incapacitates them. The case then appears one of aortic regurgitation, and is regarded usually as such. The pulse will usually show the more skilfully hid enemy, whom it is necessary to attack, if the patient is to be relieved; it is a pulse of high pressure, and it is constantly full, although an aortic regurgitant murmur exists, which usually produces an empty or collapsing pulse. On the other hand, perhaps the aorta will more or less escape, while the smaller vessel, especially those of the brain, are the main object of attack. Here we shall have a few warnings—headache, vertigo, epistaxis, a passing paralysis, a more severe apoplectic seizure, and then the final blow. Take the warning which the pulse offers, reduce the arterial pressure, and the patient's life may be prolonged. Or the attack may be more insidious and more difficult to guard against; the atheromatous vessels may become plugged, or by their rigidity may seriously impede blood-supply, and softening of the brain may result. Amidst the general diffusion of atheroma, the coronary arteres may suffer severely; then the stress falls doubly on the badly-nourished and over-taxed heart. Attacks of angina warn us of the impending danger, which it is difficult indeed to combat, though temporary relief may be obtained. At last on one occasion the arterial spasm or increased resistance is worse than usual, and the over-taxed heart dies paralysed by the distention which its degenerate muscle fails to overcome.

Uræmia, so called, includes another group of cases which are seen in this disease, and sometimes death is produced by it. This more frequently occurs during the acute disease or during an acute attack supervening on the chronic disease; occasionally such symptoms are the only signs of the sudden exacerbation of the malady. These symptoms may be divided into three great groups: those arising from the gastro-intestinal canal, those from the lung, and those from the brain. In the first group are those attacks of vomiting and diarrhœa so common in Bright's disease; they are, doubtless, due to the gastric or gastro-intestinal catarrh which are well known as complications of the disease; it merely means that in these particular cases the stress of the disease had fallen upon these organs. It is well known that the stomach undergoes similar changes to the kidney in Bright's disease, that acute catarrh is found in the stomach when it exists in the kidneys: moreover, as I have before remarked, the disease affects all the mucous membranes and the skin as well as the kidneys, and it may probably make either its main point of attack. The symptoms known as uræmic asthma are rather more difficult of explanation. The theory that they are due to spasm of the branches of the pulmonary artery, caused by the poisoned blood, I cannot very readily accept; others can be suggested which appear to me equally probable. Many cases may be of the nature of ordinary asthma, due to reflex contractions of the muscles of the bronchial tubes, excited by the bronchitis, which is more common, just as the vomiting is excited by the gastric catarrh;

other cases, again, appear explicable by a temporary dilatation of the right side of the heart (similar to that which occurs in the left in angina pectoris), due to the high pressure in the right side brought about by the emphysema and bronchitis, which may at any time be suddenly increased by the inhalation of cold air, irritant fumes, or some similar exciting cause.

1. Albuminuria, though occasionally produced by other causes, is generally the result of increased pressure in the capillaries of the kidney, either venous or arterial.

2. Neither albuminuria nor dropsy are usually present in chronic Bright's disease; when present they indicate acute or epithelial changes.

3. The blood-condition which produces the high arterial pressure of Bright's disease is the primary condition, and is not secondary to deficient renal excretion, as held by Bright himself and subsequently by nearly every authority upon the subject.

4. The most generally accepted account of the disease and its symptoms fails to recognise it in by far the larger number of cases in which it exists.

5. Cases present themselves wearing the aspects of various forms of heart disease, of bronchitis, of cirrhosis, of cerebral disease, and many other conditions, in which we can only discover the existence of chronic Bright's disease, as the *fons et origo mali*, by the signs of high pressure in the arterial system.

6. The cardio-vascular changes, when found alone, may be taken as evidence of the existence of the disease.

7. Similar changes to those found in the kidneys exist also in the mucous membranes, in the skin, and in other parts.

8. The condition of high pressure is almost constantly present in old age, and, in one form or other, brings about a large proportion of the deaths in persons over fifty.

9. The existence of high arterial pressure in the pulse of young persons indicates a diathesis, and is of grave importance.

10. The same condition, being of frequent occurrence, after the age of fifty is not of such great importance, unless present to an excessive degree; it then produces serious symptoms, and calls for active treatment.

Of these propositions, Nos. 6 and 7, and in great measure No. 3, have been already enunciated by Sir Wm. Gull and Dr. Sutton.—*London Lancet.*

THE SIGNIFICANCE OF PERSISTENT VOMITING IN YOUNG WOMEN, AND ITS RATIONAL TREATMENT.

BY J. A. DACOSTA, M.D.

I will now show you some interesting cases from the women's medical ward, and give a few observations upon vomiting as a symptom of disease. This patient is a German, 25 years of age. Her family history is not good; a sister and her father both died of consumption. She states, however, that she herself has always been healthy. Beginning to menstruate at seventeen, the menstrual function then stopped until she was twenty, and since then has been irregular. She married at eighteen, and became a widow at twenty-four The irregularity of menstruation was not only during her married life, but occurred prior to it, and has existed since.

She came into the ward with what appears to be a very serious difficulty; she was vomiting incessantly, and had been vomiting for a year; she has been in the hospital just one week. You have heard her statement, that she had been vomiting for a year. Questioning her before you, she says that occasionally she could retain her meals, but of her three meals she certainly lost two every day. She did not vomit between meals. The resident physician, who has watched the case, says that she does vomit at times between meals; her own statement must, therefore, be modified, but the vomiting is certainly aggravated by eating food. She occasionally, but not often, wakes up at night to vomit. She was a stout, healthy woman, but in consequence of this disorder she has become thin and pale, although at this moment she does not look quite so pallid and wretched as she ordinarily does. She has picked up wonderfully within the last few days, and she has not vomited at all to-day.

The first thing to be done was to examine the vomited matter. This has been accomplished, with a negative result, in that it was found to contain no sarcinæ, and no blood cells, nothing but mucus and particles of food.

With the condition stated, there is associated a slight, dry, irritative cough, which she says she has had during the whole period of her sickness, that is for more than a year; please observe that there is no expectoration with it.

Before making any remarks upon this case, I will examine with you the gastric symptoms and the intestinal organs generally. The tongue is slightly coated and flabby; it is broad and indented by the teeth. There is some tenderness in the middle dorsal region of the spine; there is also soreness on pressure in the epigastrium, but there is no prominence, thickening or tumour to be found; nothing hard can be felt in the abdominal cavity, but there is a generally diffused soreness about the stomach, not localized, however, in any particular spot. The bowels, generally, are constipated.

I will examine the lungs, and see if this cough has any meaning; but find that it has not; the respiratory sounds are healthy. The urine has been examined, and does not contain any abnormal ingredients; to read you the actual note, it is as follows: Urine, specific gravity 1 025, acid, contains neither albumen nor sugar, and is of normal colour. There has been no fever, and her temperature this morning is 98½.

I have now given you the history and the present condition of this case, and you will ask me what is the cause of this persistent vomiting, and what remedies have been employed that could have stopped it in this short space of time—in not more than three days since the treatment began?

In the first place, what is the matter with the woman. When I saw the patient in the ward and heard this history of uncontrollable vomiting, my first thought was that this is a case of irritable stomach, similar to others I have seen occurring in young women, and associated with gastric ulcer. The appearance of the tongue, her age, the sore spots in the back, along the spine, the vomiting after taking food, were all in favour of this view, but I very shortly dismissed the idea. I knew that gastric ulcers do not have general soreness, but rather localized tenderness in the epigastric region; here it was general. I also knew that if this were a case of gastric ulcer, since it had existed for a year, it should give us all the symptoms of such a lesion; we should have hæmorrhage, and above all, we should have pain, increased by eating. The most prominent symptom, pain, was absent; the next most prominent symptom, vomiting of blood, was also absent. I therefore rejected this for another idea. In the last year I have seen three cases, two in private practice, and one in this hospital, in which there was excessive vomiting; the patients were reduced to the verge of death—vomiting, vomiting, vomiting; nothing stayed upon the stomach; in these I found that the difficulty was not an ulcer of the stomach, but was due to reflex irritation from some other organ which itself was the seat of disease. The cause of the trouble, I discovered, was some form of flexion of the uterus, with congestion, and perhaps more or less ulceration. This was the cause of irritation, and the vomiting in these patients at first resembled, in its pathology, the vomiting of pregnancy, but in the course of time became complicated with some gastric catarrh, from the long continued functional disorder.

In the light of this experience I began to suspect that such was the case here. An examination was made, the result being that a retroflexion of the uterus was discovered. Now, of course, the case begins to clear up. It is one of reflex vomiting, with some gastric catarrh, going on for an entire year, in spite of the greatest care in regard to diet and general treatment.

When she was admitted into the hospital she was simply put upon a diet of milk and lime water, until her condition should be observed. The vomiting continued; although it lessened under the strict diet, it did not disappear. Now, you wish to know how we have checked this vomiting, how accomplished this result? I gave her the treatment that had been previously successful in my experience—the application of ice bags to the spine, between the shoulders, leaving them on for some time, until the skin is thoroughly cold and she begins to feel chilly. She has had absolutely no internal treatment; the diet has been the same; but she has improved almost from the first day of the application. Now, gentlemen, you will not always be as successful in the use of this remedy alone; but as I know from experience its value, I was determined to give it a trial. Is there nothing we can combine with this

treatment? Yes. Remember that we tried it alone here, because we have not as yet found it necessary to use anything else in these cases. I have also used the bromide of sodium, which lessens reflex irritability and is not offensive to the stomach; it may be given in ten or fifteen grain doses, three or four times daily. I also purge the patients occasionally by stimulating enemata, or a saline aperient by the mouth. If the stomach will bear it, any of the bitter waters, Vichy or Carlsbad, will answer well. I occasionally, also, use a blister to the spine. I do all this quite irrespective of any treatment that may be called for by the uterus itself, which should receive early attention. In our patient we have not resorted to anything in the way of systematic local treatment, but she shall have, to-day, an appropriate pessary introduced; but you may now see the effects of the general treatment before any local remedies are used. No permanent reliance, however, can be placed upon palliative measures until the source of the reflex irritation is overcome; while, on the other hand, the long continued habit of vomiting may not be made to cease immediately simply by the removal of the uterine disorder. These cases of chronic vomiting are difficult to manage, and you will often find them unsatisfactory to treat.

The diet shall be gradually and cautiously extended. Her tongue is cleaning, and it will not be amiss to give her pepsin—say five grains of saccharated pepsin three times a day, while the ice bags are continued, to keep down the irritability of stomach and the sensitiveness of the spinal cord. These shall be applied at least twice a day. If you like after a while to administer some bitter tonic, it will come in very well.

Before dismissing this patient, I will call your attention to the resemblance which this case bears to what is called purely hysterical vomiting, but in which you will not, as a rule, find any marked ulceration, or flexion of the uterus, as we have here. Moreover, in this case we have not the symptoms of this nervous state which has been termed hysterical. The maladies are similar but not alike. In conclusion, I will remind you that in so-called hysterical vomiting you need not expect the same results from treatment that we have obtained in this case.—*Med. and Surg. Reporter.*

NOTES ON TREATMENT OF DIPHTHERIA.

BY T. M. LOWNDS, M.D.,

Late Professor of Anatomy and Physiology, Grant Medical College, Bombay.

As diphtheria has lately occupied considerable attention, I may be permitted to narrate the treatment I have pursued for the last eleven years with almost unbroken success. Looking, with the late Dr. James Begbie, on the disease as allied to erysipelas, I have treated it with one of the persalts of iron, and I may say that, however successful the tincture of perchloride of iron has been in erysipelas, I believe the form of the persalt that I have used is quite as efficacious in diphtheria. My cases of the disease have occurred at all ages, from under one year up to seventy-six, the last being that of my oldest patient. The fatal case (seen in consultation) was one immediately following scarlatina, and it proved fatal in two days.

A large number naturally comprises a vast proportion of cases of slight severity, some of which would probably have done well under any treatment which did not lessen the powers of life; but upwards of twenty were cases very severe, if judged by the great depression of the vital powers, the dusky hue of the countenance, the deep redness of the fauces where the exudation did not conceal it, and, lastly, the appearance of the characteristic of the disease—the throat exudation.

The general form of prescription, which I have used invariably, modifying dose and frequency of administration according to the age of the patient and the severity of the disease, is as follows: Tincture of perchloride of iron, three to four drachms; solution of acetate of ammonia, an ounce and a half to two ounces; chlorate of potash, one drachm to a drachm and a half; water to eight ounces. It must be observed that in this mixture the perchloride of iron is converted into the peracetate, and there is also contained a portion of muriate of ammonia. There is also chlorine liberated, at least it is so when the tincture or solution is added to chlorate of potass; but as these notes have reference solely to treatment, I need not refer further to the changes which take place.

This mixture I have used as frequently in the worst cases as a teaspoonful every hour, during the first day or days of treatment. I have never interfered with the sloughing exudation in any way, only prescribing a gargle or wash containing half a grain of permanganate of potass in an ounce of distilled water, to be used frequently. This may be applied with a sponge or a brush, or inhaled as atomised vapour. I have always tried to get one evacuation daily from the bowels, and have supported the powers of life by wine, soup, milk, &c., as each case seemed to demand. How free such support has occasionally been, one of the cases outlined will show. Lastly, I have always insisted on perfect ventilation of the bedroom by a window opened at the top, so as to insure fresh and pure air to diphtheritic sufferers.—*London Lancet.*

LOCAL APPLICATION OF CHLORAL IN DIPHTHERIA.

Dr. Rokitansky of Innsbruck has used a 50 per ct. solution of chloral hydrate in three cases of diphtheria where the ordinary methods had failed entirely, and was astonished at its striking effect upon the local processes. The solution was applied with a hair pencil every half hour. The pain caused by it was severe in only one case, in which the under surface of the tongue was thickly covered with a diphtheritic deposit. Intense salivation occurred after each application, and in a few minutes the pain ceased entirely.

In two cases, in which the diphtheritic layer partially covered both tonsils, the pencilling scarcely produced a sensation of pain. After three applications of the solution, *i.e*, in an hour and a half, large pieces of the membrane were removed with the pencil, without difficulty. The surface thus exposed was reddened; in the deep portions the finest granular formation were visible. In the two other cases the diphtheritic layer was removed; after two days the surface of the wound had granulated. In the first case the entire process had disappeared after four days. As soon as it was remarked that the normal tissue appeared the solution was gradually weakened, until, after eight days all the treatment could be stopped, since the cure was complete.—*Med. Neuigk.—Lancet and Clinic.*

EFFECT OF DIET ON LIQUOR-DRINKING.

Charles Napier, an English scientific man, has been testing the truth of Liebig's theory that liquor-drinking is compatible with animal food, but not with a farinaceous diet. The experiment was tried upon twenty-seven liquor-drinking persons, with results substantiating the Liebig theory. Among the more striking instances of reform brought about by a change of diet was that of a gentleman of sixty, who had been addicted to intemperate habits for thirty-five years, his outbursts averaging once a week. His constitution was so shattered that he had great difficulty in insuring his life. After an attack of delirium tremens, which nearly ended fatally, he was persuaded to enter upon a farinaceous diet, which, we are assured, cured him completely in seven months. He seems to have been very thin at the beginning of the experiment, but at the close of the period named had gained twenty-eight pounds, being then of about the normal weight for a person of his height. Among the articles of food which are specified by Napier as pre-eminent for antagonism to alcohol, are macaroni, haricot beans, dried peas, and lentils, all of which should be well boiled and flavoured with plenty of butter or olive oil. The various garden vegetables are said to be helpful, but a diet mainly composed of them would not resist the tendency to intemperance so effectually as one of macaroni and farinaceous food. From this point of view, highly glutinous bread would be of great utility, but it should not be sour, such acidity being calculated to foster the habit of alcoholic drinking. A like remark may be applied to the use of salted food. If we inquire the cause of a vegetarian's alleged disinclination to alcoholic liquors, we find that the carbonaceous starch contained in the macaroni, beans, or oleaginous aliment appears to render unnecessary, and therefore repulsive, carbon in an alcoholic form.—*Louisville Medical News.*

Langenbeck has performed tracheotomy 700 times in cases of diphtheria. Some years he has saved as high as 40 per cent. and in others only 10 per cent. He lays down the rule that one should operate before signs of extreme dyspnœa and blood-poisoning set in.

Surgery.

THE DIAGNOSIS OF ABDOMINAL TUMOURS.

BY CHRISTOPHER HEATH, F.R.C.S., ENG.

Several cases of abdominal swellings having passed through my wards during the last few months, I propose to-day to discuss the diagnosis of abdominal tumours, taking for my text the very interesting case of a young woman now upstairs. Briefly, her history is, that she was admitted with a well-marked psoas abscess on the inner side of the right thigh, and with a tumour on both sides of the abdomen, the left being considerably larger than the right. Menstruation having ceased for some little time, it seemed possible that there might be double ovarian disease, for it was quite clear that there was no pregnancy; but we found that we had really to deal with a double psoas abscess only, the tumour on the right side disappearing as the matter drained off, and the left one having a distinct fluctuation beneath Poupart's ligament in the upper part of the thigh, where I propose to introduce the aspirator this afternoon.

The following tumours are common to both sexes.

Ascites, or dropsy of the peritoneum, gives an uniform roundness to the lower part of the belly when the fluid is small in quantity, or a general distension of the abdominal walls if much fluid be present. The skin is tense and shining, and the umbilicus flat or protruding, and the superficial veins enlarged. On palpation, a distinct wave of fluid can be felt from one side to the other; and when the patient is recumbent, the intestines float forward, giving a clearer note on percussion in front than in the loins, where the fluid collects. On turning the patient on his side, the fluid gravitates to the lower part, and a clear percussion-note may be obtained on the higher side, provided the abdomen be not very tense.

In a case of moderate ascites, it will be possible to map out the liver, stomach, and spleen, by careful palpation and percussion; but if a large quantity of fluid be present, this will be impossible until paracentesis has been performed.

A *distended bladder* is in the median line and bulges out the central portion of the abdominal wall. Percussion over it is dull, unless some coils of small intestine should happen to cover it, which is not unfrequently the case, while both flanks are clear when the patient is recumbent. Pressure over the tumour causes pain and a desire to micturate, and the use of a catheter results in its gradual disappearance.

Tympanites, or general distension of the intestines, is not unfrequent in hysterical women, in whom borborygmi, or gurglings, are commonly heard. Extreme tympanites may occur in either sex as the result of intestinal obstruction, in which case the distended coils of small intestine may be felt or seen rolling about beneath the tense abdominal wall. Or it may occur as the result of peritonitis, in which case the intestines are usually fixed. The percussion-note in all cases is tympanitic.

Solid tumours, dull upon percussion, and to be readily mapped out, provided there be no ascites, may be connected with the liver, spleen, intestines, or kidney. A tumour occupying the right hypochondrium, and extending forwards to the middle line or beyond it, and downwards to the pelvis, dull on percussion and solid to the touch, or possibly with a fluctuating spot, will be the liver. The diagnosis will be rendered certain if the edge of the liver with the notch in it can be felt.

A tumour occupying the left hypochondrium, and extending forwards and downwards, dull on percussion, and with a notch in its border, must be the spleen.

A small hard mass, slightly changing its position from time to time, will be either a mass of fæces impacted in the intestine, or a mass of cancer attached to its wall. Impacted fæces are most common in the large intestine, and give a somewhat doughy sensation to the fingers when steadily pressed against the mass. Hard cancer is most frequent at the pylorus and the lower end of the small intestine, close to the cæcum, or in the sigmoid colon, and is perfectly unyielding.

An obscure tumour in the loin can be best examined when the patient is recumbent, one hand being placed beneath the loin, and the other immediately below the false ribs, the ab-

dominal muscles of the patient being relaxed as far as possible by flexing the thighs, and bending forward the trunk. If it be a mass of fæces in the ascending or descending colon, it will be readily felt; but if an enlargement of the kidney, it will be more deeply placed, and the resonant colon will be found in front of it. The possible existence of a movable kidney must be borne in mind.

A *fluid tumour* in the loin must be due either to cystic degeneration of the kidney, or to psoas abscess. The kidney may, owing to obstruction of the ureter, become enormously distended with fluid, so as to form a distinctly fluctuating tumour in the loin, which never finds its way into the groin. A psoas abscess, on the other hand, tends to pass into the groin, and fluctuation may usually be traced beneath Poupart's ligament into Scarpa's triangle, where an impulse will be felt on the patient coughing. Symptoms of caries of the spine, with, probably, irregularity of the spinous processes, will be found if carefully looked for.

An obscurely fluctuating swelling in the *iliac region* will probably be an iliac abscess due to disease of the pelvis or lumbar vertebræ, or of the sacro-iliac joint. The condition of this joint is best tested by forcibly squeezing the innominate bones together, and then attempting to draw them asunder by pressure on the iliac crests.

On the right side, a fluctuating swelling in the iliac region may be due to a perityphlitic abscess, or abscess caused by inflammation of the cellular tissue around the cæcum, the acute symptoms of which will be present; and, if perforation of the cæcum have occurred, there will be crepitation of the cellular tissue from the escape of the intestinal gas.

In the *male*, a solid tumour in the iliac region may be due to a retained testicle taking on inflammatory swelling, in which case acute inflammatory symptoms will be present, or developing medullary cancer with considerable rapidity. The presence or absence of the testicle from the scrotum, which should always be investigated, will give the clue to the case.

In the *female*, the possible existence of a "phantom tumour" must not be ignored; for occasionally the irregular contraction of the abdominal muscles gives rise to a tumour of such solidity as to deceive the most experienced surgeon, but disappears absolutely under the influence of chloroform. No doubt some of these phantoms have been examples of loose kidney, in which the organ is readily displaced.

A tumour in the median line, rising out of the pelvis, is probably uterine, if it be not the distended bladder. Pregnancy is first to be eliminated by inquiry as to menstruation, by examination of the breasts, and by listening for the fœtal heart, which, after the fourth month, ought to be recognizable. Lastly, a vaginal examination will determine whether the *os uteri* is soft and velvety, as is the case in pregnancy. All suspicion of pregnancy being removed, the introduction of the uterine sound will determine whether the long diameter of the uterus is greater than the average (two inches and a half). Supposing the uterine sound to pass four or five inches readily, and to move with the tumour when it is pressed from side to side, it is obvious that the tumour is uterine, and probably a fibroid.

A tumour occupying one side of the abdomen, having grown up from the pelvis, is probably ovarian. It is dull on percussion and elastic to the touch, or, if of large size, may fluctuate distinctly. If no ascites be present, both flanks will be resonant, in whatever position the patient is placed; but, if there be fluid in the peritoneum, the most dependent part will be dull, though the dulness over the tumour will not vary.

When fluctuation is present, but it is doubtful whether it is ascitic or ovarian, an assistant's hand pressed edgeways into the median line over the tumour will serve to break the wave of ascites and thus clear up the doubt.

A cyst with such thin walls that the fluctuation closely resembles that of ascites is probably a cyst of the broad ligament (parovarian); and tapping will make its nature evident at once, the fluid being perfectly limpid, whilst that of ascites is yellow serum, and that of an ovarian cyst darker and, as a rule, more viscid.—*Brit. Med. Journal.*

PERSONAL.—Dr. C. H. Lavell, of Kingston, is practising in St. Paul, Minnesota.

TREATMENT OF PRURITUS.

BY L. D. BULKLEY, M.D.

There are certain regions which are very apt to be affected by a local pruritus, which at times is terribly distressing,—these are the anus and genital region. For this local itching one of the most effectual local measures which can be employed is hot water. And it should be used very hot, so that the application of it is uncomfortable to the hands. In pruritus of the anus and vulva, I direct that a cloth—as a handkerchief—shall be dipped in the water and held firmly against the part until the heat is dissipated, when the application is renewed once or twice more. The part is *not* to be *bathed* in the water, as the term is ordinarily used, but to be treated as above described. Care should be taken that the operation is not prolonged, and that the water is really hot, or a reaction sets in and the parts are weakened instead of strengthened by the water; two or three minutes generally suffices.

After the application of the water, some local remedy must be used at once, and the one perhaps most generally serviceable in lighter cases is carbolic acid, either in ointment or solution; ten to twenty grains to the ounce of cosmoline often gives great relief; it may, of course, be used much stronger. In pruritus ani, after the hot-water applications, I have repeatedly found the best application to be equal parts of the unguentum belladonnæ and the unguentum hydrargyri, well-rubbed together, and inserted on cotton batting as deeply as possible.

It must never be forgotten that the most obstinate and distressing pruritus ani may be due to the presence of minute cracks and fissures, and the very best method of relieving the itching is to pencil the fissures with a stick of nitrate of silver, tucking in a bit of cotton afterwards, under which they generally heal promptly and kindly. Nitrate of silver is also very conveniently and effectively applied in itching of the anus and genitals, in solution in the spiritus etheris nitrosi, of a strength of from five to twenty grains to the ounce. Very great relief—and I have seen cure to follow—is obtained in pruritus scroti from the following wash: R.—Bismurth. subnitrat., ʒij; acidi hydrocyan. dil., ʒij; misturæ amygdalæ, ʒiv; M. To be shaken and well applied. The poisonous character of the hydrocyanic acid must always be borne in mind, and the wash should not be used to surfaces largely abraded.

No little relief is afforded to pruritus, both local and general, from the compound of chloral and camphor, which I had the honour of introducing to the profession in this connection some time ago. It is formed by rubbing together the hydrate of chloral and powdered camphor in a mortar until a liquid results, and then adding this to ointment. Ordinarily a drachm of each in the ounce will be sufficient, but this amount may be doubled, if necessary; or sometimes a lesser quantity will suffice, while even that first mentioned may prove too stimulating. When applied to a denuded surface, this remedy causes considerable burning.

In intractable itching about the genitals, the possibility of a parasitic cause must always be borne in mind, and the crab-louse may sometimes be found when least suspected. A vegetable parasite may likewise be a cause of this distressing symptom, and a mild case of tinea trichophytina cruris—the eczema marginatum of Hebra—will often long pass unrecognized. Quite lately, Dr. Stevens, of Lebanon, Ohio, reported some cases of pruritus vulvæ cured by the local use of sulphurous acid; possibly in these cases the mucous membrane itself may be the seat of a parsite.

Caustic potash is a very valuable anti-pruritic, and when properly applied is of the greatest service in pruritus of the vulva. In weak solution,—ten to twenty grains to the ounce, with a little glycerine,—it may be applied freely, the parts being then covered with some mild unguent or the carbolic acid ointment, spread on linen and laid on, and tucked in between the labia. In stronger solution,—half a drachm to one or even two drachms to the ounce,—it is to be rubbed on less frequently, but more actively, with a view to produce abrasions of the surface, allow exudation, and thus to cause absorption of thickened tissue; the applications cause much burning, but the relief afforded to an obstinate pruritus quite compensates for this.

The subject of itching is too vast a one to be more than touched upon in such an article as this, and I will only add that in the great majority of the cases of pruritus the itching is but secondary, a symptom the removal of whose cause must be sought for in other measures than those directed against the skin itself.—*Archives of Dermatology.*

CASE OF INTESTINAL OBSTRUCTION.

Mr. Bellamy read notes of a case of rare form of Intestinal Obstruction, due to invagination of the small intestine into the rectum; Gastrotomy; Recovery. The patient was a pale, delicate woman, aged thirty-four, who came under care on February 16th, 1879, with symptoms of obstruction of nine days' standing. She had an inguinal hernia on the left side, for which she wore a truss, which was left off a short time previously. She was subject to habitual constipation, and on three occasions the retention of fæcal matter had given rise to very serious symptoms, which, however, always yielded to ordinary measures. On admission a hard swelling was felt in the left iliac fossa in region of inguinal canal and sigmoid flexure. There was intense pain over lower part of the abdomen, and her eructations smelt stercoraceous. On examination of rectum by the entire hand, under chloroform, Mr. Bellamy found that he could not get his fingers past the lower end of the sigmoid flexure, and that it seemed to be filled up and constricted by some intra-abdominal stricture or protrusion through the separated softened muscular fibres of the rectum. Deferring operation for a time, the patient became much worse; vomiting stercoraceous; and on the evening of the 17th Mr. Bellamy proceeded to operate, under strict antiseptic precautions. Thinking there might be some involution of small intestine, perhaps through hernia into rectum, as mentioned by Linhart, or a hernia reduced *en masse*, he cut down on the external ring, exposed it, and, passing the finger into inguinal canal, found no gut there, but felt the sigmoid flexure greatly distended. Then, enlarging the opening, and introducing the entire hand into abdominal cavity, he found the posterior utero-vesical fold of peritoneum greatly developed, and also a bundle of small intestine lying below it and tucked into the anterior wall of the rectum. In addition to this, he felt what appeared to be bands of organized lymph stretching across the first part of rectum, probably due to some earlier inflammation in the same locality rendering reduction per anum impossible. Again, with the entire right hand in the rectum and the left in the pelvic cavity, he broke down adhesions, and, by gradual manipulation, reduced the prolapsed bowel. Very shortly after, flatus escaped, and within twelve hours a most copious evacuation, occurred, affording immense relief. The patient progressed favourably until the 22nd, and had not a bad symptom of any sort, but some delirium came on, and she tore off her antiseptic dressings; the delirium was, however, subdued by subcutaneous injection of morphia and by chloral, and at the time of the meeting the wound was looking quite healthy, and she was out of danger.—*Proc. of Clinical Society in London Lancet.*

Chrysophanic Acid in Psoriasis.—The ointment should always be prepared by melting the excipient, dissolving the acid in it for some little time over a water bath, and stirring until cold. It is to be well and thoroughly rubbed into each of the affected spots, which will then appear of a much lighter colour than the surrounding skin, which is dyed of a brownish purple. The applications are to be made once or twice a day; some have advised them thrice daily, but I have sometimes found that a single application each night has in a short time proved too stimulating, causing such an abundant erythematous eruption that they could not be repeated. The applications should be continued until the psoriasis spots have ceased to be visible as light-coloured islands in the purplish background, and the whole skin is tinted uniformly by the ointment.

Dr. George B. Wood, Emeritus Professor of Medicine in the University of Pennsylvania, died last month, aged 82. He is well known as the author of a Theory and Practice of Medicine, "Therapeutics and Pharmacology," and "United States Dispensatory."

Midwifery.

NOTE ON INTRA-UTERINE MEDICATION AND STERILITY.

BY W. S. PLAYFAIR, M.D., F.R.C.P.

I have been much interested by Mr. Wiglesworth's case of occlusion of the os and cervix uteri produced by the application of fuming nitric acid, published in the last number of the *Obstetrical Journal*. It certainly teaches a lesson of caution in the use of that remedy which is not needless, since it has been applied by some, especially in Ireland, with a freedom which has always seemed to me somewhat rash. My own experience with regard to it is not very great. I have, however, used it in many cases of severe menorrhagia, associated with endo-metritis, frequently with very remarkable benefit, and, I am bound to say, without ever having seen any ill effects follow. My object, however, in writing this note is to comment on the latter part of Mr. Wiglesworth's Paper, in which he propounds the theory that the application of caustics to the interior of the uterus may be followed by sterility. If this were the case it would, no doubt, be a strong objection to their use. It would be interesting to hear the experience of others on this point. So far as my own goes it is directly opposed to Mr. Wiglesworth's. I may claim to have paid a good deal of attention to this matter, having communicated to the meeting of the British Medical Association at Leeds, in 1869, a Paper on the treatment of chronic uterine catarrh, which I believe was the first in this country in which systematic intra-uterine medication was advocated, and subsequently a series of lectures* on "Intra-Uterine Medication in the Treatment of Chronic Uterine Catarrh." For the past ten years scarcely a day has passed on which I have not practised intra-uterine medication in public or in private practice, possibly riding my own hobby a little hard, as many of us are apt to do. Not only have I never seen anything in the least approaching to Mr. Wiglesworth's case, but very rarely indeed anything beyond the merest transitory irritation. Indeed, I am as sure as I can be of any fact in medicine, that there are a large class of otherwise intractable cases, which yield, I do not say easily, but certainly to properly conducted treatment of this kind. So far from having any reason for thinking that it tends to produce sterility, my own experience would lead to the very opposite conclusion. It has been a matter of every day experience with me to meet with cases of chronic endo-metritis, with sub-involution, after a labour, perhaps years before, in which intra-uterine medication has been followed so rapidly by impregnation, as to leave no doubt of the result being due to the removal of the cause which led to sterility. In cases of this kind there is generally a large, bulky, and possibly flexed uterus, with an abraded cervix, a patulous cervical canal, and much glairy mucous pouring from it. So commonly have I found pregnancy following the cure of these conditions, that I have over and over again remarked to patients, who have expressed themselves as being rather aggrieved at finding themselves in the family way, that I had come to consider pregnancy as the nearly-certain result and proof of a satisfactory cure. Only this afternoon I happened to see a patient with Mr. Tait, of Highbury, whose case affords a good illustration of this. She had been a great sufferer from conditions very similar to those mentioned above, for four or five years, during which she never became pregnant. A few months ago she was treated by intra-uterine medication with carbolic acid with marked benefit, and now she is undoubtedly pregnant.

It may well be asked, why should such treatment produce sterility? It is, no doubt, very desirable that we should possess accurate information, which we do not now do, as to the state of the uterine mucous membrane in such cases, and the effect of caustics upon it. Pending the acquisition of such knowledge, I think it fair to assume that the result of such applications is similar to that on the mucous membrane covering the cervix, and this is open to our inspection. Any one can satisfy himself that after swabbing a florid, abraded, granular, and bleeding cervix several times with a suitable application, it assumes the smooth velvety appearance it ought to have in the healthy state. What reason is there to doubt

* *Lancet*, vol. i., 1873.

that something similar occurs in the uterine mucous membrane, since its treatment is generally followed not only by the relief of pain and other local symptoms, but by healthy menstruation and the arrest of the glairy mucous discharge so characteristic of its morbid state? Nor, theoretically, is it at all difficult to understand why abundant catarrhal discharge from the uterus should prevent impregnation. Unless, therefore, some more valid evidence of intra-uterine medication producing sterility is brought forward than Mr. Wiglesworth produces, I shall continue to hold the opinion I had formed, that in a large proportion of cases of chronic endo-metritis and uterine catarrh it is one of the best means of removing it.

I do not enter into the relative merits of the various applications to be used, although I venture to quote a passage from my lectures on this subject to show why, as I still believe, carbolic acid is the best, and free from the risk of producing the result which followed the use of nitric acid in Mr. Wiglesworth's case:—"There are certain properties, too, possessed by carbolic acid, which render it preferable to all others as an intra-uterine application. Neumann, of Vienna, has shown that when applied in a tolerably concentrated form, such as I use, it causes the tissues to shrink and mummify, but they never swell; nor does it produce an eschar, as do the stronger caustics, such as potassa fusa, the acid nitrate of mercury, or even nitrate of silver. We can, therefore, use it freely without any risk of producing contraction of the canal of the cervix—a result which has followed the use of other agents. Certainly no case has come under my observation where the slightest approach to such a result has followed the use of carbolic acid."*

Although foreign to the immediate object of this note, I may take this opportunity of saying that increased experience has taught me that intra-uterine medication is best practised within the ten days immediately following the cessation of a period, probably because the deeper layers of the uterine mucous membrane are then reached in consequence of their denudation during menstruation. If practised towards the end of the menstrual interval it is sometimes apt to bring on menstruation prematurely. Practically, I find that two applications, at an interval of three or four days from each other, during the time I have indicated, are all that is required.—*Obstetrical Journal.*

* *Lancet*, Feb. 15th, 1873.

Original Communications.

POLYPUS OF THE HEART.

BY T. J. W. BURGESS, M.B.

(London Asylum for Insane.)

J. M——, female, aged 35 years, had been an inmate of asylum about nine years, and was, at time of death, a case of Dementia. She did nothing but sit about the halls, taking no exercise of any kind, but was strong, hearty, and very fat. Jan. 17, '79. Remained in bed this morning, saying she was too sick to be up. No information whatever could be got from herself, and an examination showed all the vital functions being performed in an apparently normal manner.

Jan. 19. Had a slight attack of diarrhœa during the day, and in the evening her attendant noticed her covered with a light, scarlet rash, which, however, had quite disappeared when she was seen about an hour later. Pulse, &c., kept about normal.

Jan. 20. Said her throat was sore, but would not allow it to be examined. Had diarrhœa, but would take no medicine. Pulse 120 and feeble. No other symptoms of note, and no reappearance of rash.

Jan. 21. Pulse 120; respiration 20. No other objective symptoms, and no information could be got from herself. She was evidently very ill, but physical examination failed to give a clue to her ailment.

Jan. 22. Early in the morning, before the physician's rounds, she got out of bed by herself, and, just after getting back again, also without assistance, died suddenly.

External appearances. Post-mortem, made eight hours after death, showed *rigor mortis* well marked and body well nourished, in fact, very fat. Hypostatic congestion of all dependant parts.

Head. Scalp was much congested, thick, and almost cartilaginous. Skull of ivory-like hardness. All the membranes much congested, and the arachnoid more or less pellucid all over the superior surface of the hemispheres. About half a pint of very dark liquid blood escaped from the vessels on removal of the brain, which weighed 44½ oz. Brain substance apparently normal.

Thorax. Fat over lower part of chest walls was about one inch thick. The lungs were crepitant and healthy. The heart was of normal size and healthy appearance, but covered with a thick layer of fat in almost its whole extent. The right auricle was completely filled with a firm fibrinous clot of a light yellow colour, extending into both superior and inferior vena cava. The right ventricle was full of dark fluid blood, which, running out, showed a small clot, similar in appearance to that found in the auricle, entangled in the columnæ carneæ. The left auricle contained a small similar clot, partially closing the auricle ventricular opening. The left ventricle was firmly contracted. No other parts of the body were examined.

TRAUMATIC ANEURISM OF OCCIPITAL ARTERY—GRAVE HÆMORRHAGE CONSECUTIVE TO SPONTANEOUS OPENING—PERIPHERAL COMPRESSION—CURE.—An old man, 69 years of age, had a fall, in which the posterior part of the head struck against a very sharp step of a ladder. The primary hæmorrhage was arrested. Eight days afterwards a pulsatile tumour was observed in the region of the wound, about the size of a small nut, but his friends were not uneasy about it until the 23rd day, when a violent hæmorrhage occurred, owing to the spontaneous rupture of this occipital aneurism. The physician who was summoned employed a metallic ring (such as are used for suspending curtains) to exactly compress the periphery of the tumour. The compression was maintained for 48 hours, and the cure was radical. Aneurisms of the occipital artery are rare: they have, on several occasions, been mistaken for abscess or malign tumours. Peripheral compression appears henceforth to be the surest means of compression in view of the richness of this region in arterial anastamoses. It has not hitherto been employed.—(*Gaz. des Hôp.*)

St. Petersburg possesses 35 public hospitals. Of these 11 are devoted to women, including 3 lying hospitals and one ophthalmic hospital; 2 are skin-disease hospitals; 3 hospitals for children; 14 general hospitals; 3 hospitals for the insane; and one hospital for men only. In addition to these there are 36 private hospitals and dispensaries in the city.

Formularies.

TO ARREST VOMITING DURING PREGNANCY.

℞ Cerii oxalat.,
Ipecacuanhæ.....āā gr. i.
Creasoti .....gtt. ij. M.
Sig. To be taken every hour.—*New Rem.*

COUGH MIXTURE.

Cod-liver Oil.....	℥ii.
Honey.....	℥ii.
Lemon Juice	℥ii.

One to two teaspoonfuls three times a day.

POWDER FOR FLATULENT DYSPEPSIA (Hérard).

Powdered Nux Vomica	15 grains.
" Rhubarb.....	60 "
Prepared Chalk	45 "
Oleo Saccharate of Mint....	ʒj.

Mix carefully and divide into 20 powders; one powder before each meal in a wafer. Two tablespoonfuls of lime water in half a tumblerful of sweetened water after each meal. Wine diluted with Orezza-water if the dyspepsia be complicated with anæmia.

(*From L'Union Médicale.*)

DECOCTION FOR CHRONIC DYSENTERY (Delious).

Take of Calumba Root.....	ʒj.
" Rhubarb Root	grains xv.
" Water.....	℥vj.

Pour the water boiling, at night, over the incised roots, and allow it to infuse until morning.

To be taken before breakfast, in chronic dysentery, to modify the evacuations, and during convalescence to combat the consecutive gastro enteralgia, with tendency to constipation or irregularity in the number and character of the stools.

CYSTITIS (W. Gross).

Balsam of Copaiva.....	1 drachm.
Benzoic Acid.....	75 grains.
Gum Arabic.....	2 drachms.
Pulverised Sugar.....	2 "
Essence of Wintergreen.	20 drops.
Camphor Water	6 ounces.

Mix. A tablespoonful every 5 hours for patients affected with cystitis when the inflammatory symptoms have lost their acuity. Wash the bladder by injections of tepid water to

which there has been added 6 centigrammes (⅛ grains) of permanganate of potash for every 30 grammes (about 1 ounce), if the urine be fœtid or muddy. Later on a solution of borax or of nitrate of silver may be injected.—*L'Union Médicale.*

Le Progrès Médical.

TREATMENT OF ASTHMA (Aubrée).

Take of Senega Root	ʒss.	
Boil in water	℥jv	until the
Decoction be reduced to	℥ij.	Filter and add
Of Iodide of Potassium	ʒiv.	
Of Syrup of Opium	℥iijss.	
Of Brandy	℥ij.	
Colour with Tincture of Cochineal	q.s.	Filter.

The patient should every day take three tablespoonfuls of this elixir, in the morning before breakfast, at mid-day, and in the evening, until the cessation of the asthma. This is almost, as Trousseau remarked, forty-five grains of iodide of potash per day.

ASTHMA (H. GREEN).

Take of Iodide of Potassium	ʒij.	
Decoction of Senega	ʒiij.	
Tincture of Lobelia	ʒvj.	
Camphorated Tincture of Opium	ʒvj.	Mix.

BOUCHUT'S SYRUP FOR EPILEPSY.

Bromide of Potassium	5 drachms.	
Syrup of Belladonna	15 "	
Simple Syrup	60 "	Dissolve.

Each tablespoonful (of 15 grammes) represents 1 gramme (15 grains) of bromide of potassium.—*L'Union Médicale.*

DISCUTIENT OINTMENT.

Extract of Conium	℥j.
Iodide of Potash	℥j.
Extract of Belladonna	℥j.
Extract of Hyoscyamus	℥j.
Axungia or Glycerine of Starch	℥j. M.

The above will exercise a manifest resolvent action upon glandular enlargements. In similar cases, and when it is necessary to leave the extract of conium in constant contact with the diseased parts, in strumous adenitis, and chronic arthritis of the same nature, it will be more convenient to employ the emplastrum conii, the formulæ for which are numerous, but which may be made simply by spreading on a piece of skin, a plastic mass, composed of one part of white wax, two parts of resin, and nine parts of alcoholic extract of conium.—Jules Simon in *Le Progrès Mèdical.*

Translations.

M. Faraboeuf, at the *Société de Chirurgie*, 5th March, 1879, said of Lister's antiseptic dressing: "The principle of occlusion had its birth in France; the drainage tube was borrowed from Chassaignac; carbolic acid has been especially studied by Lamaire; the theories of Pasteur have been laid under contribution, and if torsion but prevailed in the place of catgut, there is not a single element of the dressing but has had a Frenchman for its father."—*Le Progrès Médical.*

INHALATIONS FOR ASTHMA.

In *The Doctor*, Dr. Thorowgood recommends hypophosphate of soda, and at the same time the following inhalations: ether, 30 grammes; benzoic acid, 15 grammes; and balsam of Peru, 8 grammes; or, ether, 30 grammes; Spts. Turpentine, 15 grammes; benzoic acid, 15 grammes; and balsam of tolu, 8 grammes. Place the mixture in a wide-mouthed flask. The heat of the hand suffices to volatilize these substances.—*L'Union Méd. du Canada*, from *Courrier Medical.*

THE STATE OF CARBONIC ACID IN THE BLOOD.

At the *Académie des Sciences*, on 28th Oct., 1878, M. Paull Bert gave an account of his investigations into this subject. Following are his conclusions:—

1. The exit of carbonic acid during the respiratory act necessitates a dissociation of the super-carbonated salts of the blood.

2. These salts are not saturated with carbonic acid either in arterial or venous blood, or in the tissues.

3. The vitality of the anatomical elements can only be maintained in the presence of carbonic acid in a state of combination.

When the alkalies are saturated, and when this gas appears in excess, in a state of simple solution, it rapidly produces death.—*La France Médicale.*

THE CANADIAN
Journal of Medical Science,
A Monthly Journal of British and Foreign Medical Science, Criticism, and News.

TO CORRESPONDENTS.—*We shall be glad to receive from our friends everywhere, current medical news of general interest. Secretaries of County or Territorial medical associations will oblige by sending reports of the proceedings of their Associations to the corresponding editor.*

TORONTO, MAY, 1879.

TORONTO UNIVERSITY—ELECTION TO THE SENATE.

The three retiring members this year are, Professor Loudon, Dr. Thorburn, and Mr. Kirkland. The latter, we are informed, does not seek re-election. Dr. J. E. Graham, W. Houston, M.A., and Dr. J. H. Burns are candidates. We shall be glad to see Prof. Loudon and Dr. Thorburn re-elected, and hope that Dr. Graham will be successful.

The voting-papers will be received by the Registrar from the 1st to the 8th of May, at 3 o'clock p.m.

We have seen a circular signed "Graduates," issued, doubtless, by those whose only claim to be heard is that they are such; and who, apparently, have felt that their names are so unworthy to be associated with the title, that they have been withheld. In this circular the old animus of certain partizans is again apparent, and the whole production is discreditable alike to its authors, and—what is of some consequence—to the Alma Mater with whom they claim connexion. It cannot fail to redound to the injury and discomfiture of those from whom it emanates, for, by implication, it reveals the true character of the cause it was intended to serve. We merely make mention of it to disclaim, for our own part, and on behalf of the great majority of our fellow-graduates, any fraternity or kinship with such undutiful sons of Alma Mater.

The argument is urged that the understanding come to some time ago was, that two graduates in Arts and one in Medicine should be elected each year. No mention, however, is made of the fact that in 1875 three graduates in Arts were elected, who next year retire, and will, doubtless, again receive, as they deserve, the support of the graduates in the Faculty of Medicine, should they desire re-election. We happen to know that the candidature of Professor Loudon, Dr. Thorburn, and Dr. J. E. Graham has the approval and *active* support of a very large number of graduates in all the faculties. It is a singular circumstance, and one which has occurred before, that these anonymous circulars are always sent only to those residing outside of the city, in the hope, no doubt, that they are not well-posted as to the facts of the case, and that, therefore, there is some chance of throwing dust in their eyes. In this instance it will come short of its object, and make the "anonymous graduates" appear supremely ridiculous. The circular states that as many graduates as possible were conferred with. We know of a large number in the city who were open to a conference, and yet were not called upon for an expression of their opinion. "As many as possible" is a very indefinite term, and in this instance may be translated *a few kindred spirits and unscrupulous partizans.*

"THE SARNIA OBSERVER."—This is in our opinion the best weekly newspaper published outside of Toronto. Its columns furnish a large amount of information on the current events and topics of the day. Town and County matters are fully reported, and the Parliamentary summary is well given. Foreign and Domestic news of general interest, the Farm, the Church, Sports, &c., together with good editorial matter, make the paper worthy of a large and increasing circulation. Messrs. Eyvel & Gorman are the proprietors.

TORONTO SCHOOL OF MEDICINE SCHOLARSHIPS, SESSION 1878–79.—*First Year.*—(1) Duncan, J. T.; (2) Rogers, S. R.; (3) Knill. *Second Year.*—(1) Duncan, J. H.; (2) Bryce, P. H. *Third Year.*—(1) Cross, W. J; (2) Fisher, A. *Fourth Year.*—Prize (1) Clapp, R. E.; (2) Lehman; (3) Dryden.

Book Notices.

The Principles and Practice of Surgery. By John Ashurst, Jr., M.D. Second edition. Enlarged and thoroughly revised, with 542 illustrations; pp. 967. Philadelphia: Henry C. Lea, 1878; Toronto: Hart & Rawlinson.

The general arrangement of this work is very similar to that of Erichsen, the American editions of which have been so ably edited by Dr. Ashurst. Very many of the illustrations will be familiar to readers of Erichsen, and it is but natural that the book, though by no means a mere compilation, should, to a great extent, resemble the work of the celebrated English surgeon and author. Dr. Ashurst's work is fully abreast of the times, the latest periodical literature has been put under contribution, and the pathology is clearly and concisely given, though the author has wisely refrained from dealing *in extenso* with the many different views on this unsettled subject. "Esmarch's bandage," "Batty's operation," "Rectal exploration," "Laparo elytrotomy," "Litholapaxy," "Martin's bandage," "Cholecystotomy," "Duret's theory of concussion," &c., &c., are among the recent additions to the science and art of surgery that are described. The book is probably the best work for a student that is now published, though in some points of symptomatology, diagnosis, and treatment, the author has been even too concise. In this day, when there are so many excellent small monographs on special subjects, we think that it would have been better if the chapters on the surgery of the eye, ear, and female generative organs, had been left out, and the space devoted to a fuller discussion of the more commonly occurring surgical diseases and injuries. The practitioner, wishing information on specialties, will naturally refer to special treatises.

Chapters I. and II. deal with inflammation, the pathology and treatment of which are excellently given. In chapter III. on anæsthetics, the author, in giving the history, makes no mention of Dr. Crawford W. Long's claims to the priority of discovery, he having, according to Dr. Marion Sims, operated upon a patient under ether in 1842. Ether is preferred as an anæsthetic in a large majority of cases, as being "certainly safer than chloroform." Fatty heart is not considered a bar to the administration of chloroform, the risk in serious operations being greater without it than with it. In speaking of operations the author states that he has seen nothing in his experience to warrant the belief that scarlatina following them is anything but a coincidence; this is contrary to the opinions of recent English and French writers. The chapter on the healing of wounds and their treatment is well written. Paget's views as to union by adhesion without inflammation are not adopted—Ashurst believing the inflammatory process necessary for the repair of wounds under all circumstances, and immediate union to be effected by inflammation limited to its first stage, that of temporary hypertrophy (? hyperæmia) without lymph production. In treatment, except in very extensive wounds, or where tension is very great, plasters are disapproved of even in amputations, reliance being placed on sutures alone, the plaster being applied when these are removed. As to Lister's antiseptic treatment it is claimed that quite as good results have been obtained by surgeons who rely on cleanliness and careful constitutional and hygienic treatment. "Any mode of treatment which is so intricate and complicated as to elude the skill of such excellent surgeons as have failed with the antiseptic dressing, is not likely ever to be adopted for general employment."

In chapter IX. injuries of blood-vessels are taken up and fully discussed, the author being a strong advocate of the ligature in preference to torsion or acupressure of arteries, regarding the former as safer, and the two latter as being no better in any other respect. Catgut ligatures do not find favour. Fractures and dislocations occupy chapters XI., XII., and XIII.: if we have any fault to find in them, it is that they are too brief; what is said is well said, but the directions for diagnosis in obscure cases might have been fuller, and the different methods of treatment of special fractures might have profitably had more space devoted to them. The author describes one method of treatment and in many instances merely mentions others. Fracture of the jaw he treats with a compress and

Barton's bandage. In Colles' fracture the position of *supination* is preferred to the *semi-prone*. In speaking of fractures of the upper extremity of the femur, Buck's method by extension and sand bags, we are pleased to note, has the preference, though we hardly agree to the counter-extension by the perineal band, especially when applied to the injured side, preferring what indeed the author confesses to be usually sufficient, elevating the foot of the bed. In fractures of the shaft of the femur, Ashurst says he has never seen a perfect cure, either in his own practice or that of others; that is a cure without shortening of at least a quarter of an inch, even in children, and considers half an inch to an inch a satisfactory result in adults. In the treatment of fractures by the plaster of Paris splint we differ from the author. He does not favour their application immediately after the injury, but thinks it safer to wait until union is tolerably firm, about the third or fourth week. In fractures of the bones of the leg, the fracture box is regarded as *the* method in the majority of cases. No mention even is made of Dupuytren's splint.

Dislocations in recent cases in the author's practice have never required any other means of reduction than manipulation, with manual extension and pressure. Bigelow's work is freely used in discussing dislocations of the hip, and that author's views as to pathology and treatment are adopted. We should have been better pleased with this portion of the work if more stress had been laid on the after treatment and the importance of early passive motion, and massage in luxations of the elbow, knee, and ankle. There is no mention of compound dislocation of the elbow joint, and compound dislocation of other joints are dismissed with a few lines.

In chapter XIV., on the effects of heat and cold, the immediate relief that follows the carbonate of soda treatment of burns, and treatment of large granulating surfaces left after severe burns, by means of skin grafting, have been omitted.

Chapter XV., on injuries of the head, is very good, the treatment is sound and conservative, the expectant method being strongly advocated. The diagnostic marks between concussion and compression are not considered as plain and easily recognizable, the difference in many cases being one of degree only. He discountenances trephining in simple fracture of the skull, even where there are symptoms of compression, or intra-cranial suppurration, the diagnosis in the latter condition being always obscure. This, we believe, is sound surgery, though Mr. Hulke lately reported a successful case of trephining and aspiration of the brain, reaching an abscess in the frontal region. Hulke and Bryant regard hemiplegia as a sign of abscess and not of arachnitis.

Our author does not follow Erichsen altogether in his views on spinal injuries. He is somewhat skeptical of many reported cases of railway spine, though admitting that grave, morbid changes in the spinal cord may arise from slight blows on the back. He differs, too, from Erichsen, as to prognosis in fracture and luxation of vertebræ. That author declares "that fractures of the spine through the bodies of the vertebræ with displacement are invariably fatal:" Ashurst shows that in civil cases 18 per cent. of those of the cervical spine and 27 of the lumbar recovered. Trephining in these injuries he regards as unjustifiable.

Chapter XX. is on abscess, ulcers, gangrene, and gangrenous diseases, and is full of good, practical matter. The local treatment of carbuncle, in which the author, we are glad to see, agrees with Paget, is *not to cut* but to apply pressure, by concentric strips of adhesive plaster.

Chapter XXII., on pyæmia, is one of the most readable in the book—without entering at length into a theoretical discussion on the vexed question of pathology, the views that receive most support at the present day are briefly and clearly given. He regards pyæmia as a peculiar morbid condition, resulting from the absorption of septic material, and usually accompanied by the formation of puriform collections in various tissues and organs of the body. The word is used in a generic sense, embracing one or more morbid systemic conditions, and depends on the introduction of septic material into the blood, thrombosis and embolism being subsidiary, and not absolutely necessary. We agree with the author that in

the present state of our knowledge this is the most plausible theory.

Chap. XXIV., on Venereal Diseases, is, generally, in accord with the views of the best modern syphilographers. A more detailed description of the appearances of the various secondary cutaneous eruptions should have been given; the reader is referred to the works of specialists for information, the names merely of the syphilides being given. We do not understand how psoriasis (general) is classed as a tertiary symptom, and ecthyma placed among the secondaries. In our experience, psoriasis is a form very frequently met with in secondary syphilis; and ecthyma, we have believed to be more commonly seen in the tertiary stage. Psoriasis of the palms and soles of the feet we would class as tertiary, but not general psoriasis. Ashurst gives mercury in the primary stage, believing that the secondary is retarded and favourably modified thereby. In this he is directly at variance with Bumstead and others.

Tumours, in Chap. XXVI., are well classified on a clinical and anatomical basis. The part on diagnosis of cancers from other growths might have been more explicit: the general description is good, and the histology in accord with modern views. These remarks apply also to the chapter of surgical diseases of the vascular system. Greater stress and more explicit directions for the treatment of aneurism by rest, diet, and iodide of potassium, would, we think, be an improvement, as would more extended remarks on the diagnostic points of special aneurisms, such as axillary and femoral.

Chap. XXX., on diseases of bone, good in almost every other respect, is again rather weak in diagnosis, especially the part on bone tumours. The description, too, of the separation of a sequestrum might have been advantageously extended.

In joint diseases, the author thinks, with Sayre, that many, if not most, cases are simply of an inflammatory nature, of local origin, and as specially demanding local treatment. We do not yet see our way clear to adopt these views entirely. We think the constitutional element plays an important part in causation, and demands equal attention in the treatment. For anchylosis of the hip, Adams' or Gant's operation is advised: six cases under the author's care terminated successfully. In the knee, he prefers Brainard's operation to any other.

Of excisions, Ashurst says that, greatly as he admires the operation, he believes that, *cæteris paribus*, it is in every region of the body at least as fatal as the corresponding amputation. The directions for operation and the after treatment are clearly stated.

The treatment of Potts' disease of the spine is surely deficient, when only mention is made and a cut given of Sayre's method of treatment by plaster of Paris. In Chap. XXIX., on Diseases of the Mammiary Gland, we differ decidedly from the treatment given for "Mammitis." It is not sound surgery to advise that "As long as there is a prospect of obtaining resolution, the breast should be kept *constantly* exhausted, either by suckling or by the use of a breast pump." To relieve tension by gentle friction or the breast pump is certainly right, but to *constantly exhaust* the breast will, we think, increase irritation and inflammation. Neither do we think that the upper part of the breast is the best place to open the abscess; the author states that the opening here renders strapping more effectual.

Chap. XL., on Hernia, is capital; the taxis and non-operative treatment, and general description leave nothing to be desired. In herniotomy, Petit's operation, without opening the sac, is advised wherever practicable. Many English surgeons have discarded this method, as not giving the favourable results claimed for it. In St. George's and St. Thomas's Hospital it is almost the invariable rule to open the sac. The Surgery of the Rectum, Bladder, Urethra, and Male Generative Organs, is well up to the times.

In the chapter on lithotomy the author strongly advises the general practitioner to familiarize himself with one procedure of operation, and considers the lateral as decidedly the easiest and safest in a large majority of cases. He rightly says, "It is much better for his patients for him to be able to do one operation well than a larger number with doubt and hesitation." In speaking of catheters, Ashurst regards the flexible as quite as easy of intro-

duction as, and much less dangerous and painful to the patient than, the metallic. On this point there is a good deal of difference of opinion amongst surgeons. As in the next paragraph it is admitted that in very slight strictures, and in the later stages of dilatation, silver catheters and steel sounds are preferable, our experience inclines us to side with the author on this point.

In treating strictures by gradual dilatation it is pertinently remarked that when the patient can pass a No. 21 or 22 (French) catheter without suffering, he had better rest and be thankful. We think so too. Otis carries dilatation to a far greater extent. No description of any of the modern instruments for internal urethrotomy is given; mention by name only being given to Maisonneuve's, Otis's Thompson's, Wood's, Trelat's, Teevan's, etc., etc. Ashurst, contrary to many authorities, prefers to incise on the lower side of the stricture.

The article on Retention of Urine from stricture and its treatment is, we think, especially good, and shows, as indeed does the whole book, that the author is no mere operator, but a careful, scientific, and practical surgeon. In speaking of malposition of the testis in the perineum, excision is advised; but a better treatment has lately been successfully practised by Annandale, of Edinburgh, who transplanted the testis into its proper place in the scrotum. It is, of course, impossible in our limited space to notice everything in a work of this kind; our review is already far longer than we intended. We have, we think, shown that the book is that of a surgeon in the true sense of the term; and the work of one who, while recognizing the opinions of the authorities of the day in this branch, still has views of his own which he does not hesitate to advance and uphold when they are at variance with those of others.

Transactions of the American Otological Society. Eleventh Annual Meeting, July 1878. Vol. 2. Part. 2. Boston: Houghton, Osgoode & Company, 1878.

An elaborate report on the progress of otology, July 1876–July 1878, and some interesting papers by members are embodied in these transactions, which form a volume of about two hundred pages.

Physiological Therapeutics. A New Theory. By Thomas W. Poole, M.D., M.C.P.S., of Lindsay, Ont. Toronto: Toronto News Company, 1879.

Dr. Poole may thank his stars that the hierarchy of Medicine has not fortified its strongholds of orthodoxy by any such judicial organization as that of the *Holy Office*, by means of which, if heresy was not suppressed, at all events heretics were abundantly punished; for certainly a more heretical book than his "Physiological Therapeutics" was never obtruded into the arena of medical polemics. That a physician, hailing from a provincial town somewhere between Lake Ontario and the limits of civilization, should not merely have the temerity to declare his dissent from one of the standard, universally-accepted doctrines of medical science, but further, the audacity to write a book, in which that doctrine is vigorously assailed, and demonstrated—or essayed to be demonstrated—to be utterly at variance with the just and rational interpretation of facts, seems to us, as we doubt not it must to hundreds of those who have hitherto plodded on in reverential acquiescence in the belief handed down to us by the Fathers, almost a marvellous phenomenon. For what can be more antagonistic to our prior conceptions of the functional relation between nerve and muscle, than the idea that the action of the latter is not directly impelled and regulated by that of the former, but that on the contrary, muscular action (*i. e.* contraction) is the immediate result of cessation, suspension, or intermission of nerve action! This seems to be a cutting of the Gordian Knot, with a vengeance. Muscle sleeps, while nerve labours assiduously to purchase its repose; and muscle works while nerve idly and placidly looks on, graciously tolerating the inherent waywardness. Turn about would therefore seem to be fair play. *Somatic* death, we now learn, kills nerve at a blow; but muscle is more tenacious of life, and refuses to capitulate before molecular death (that is putrefaction) enters the field. If this be true, no doubt it is best so, for the Creator has done all things wisely.

We must not, however, wander into anticipative criticism. Dr. Poole must be allowed to enunciate his own propositions, which, however,

we do not reproduce *in extenso*, but merely their salient outlines. They are as follow.—

1st. "The muscles and muscular tissues, generally, of the body, are endowed with an inherent contractile power of their own, independently of nervous influence; but this contractile power of the muscles is regulated for voluntary purposes through the *agency* of the nervous system."

2nd. Nerve influence is that of a *restraining*, not a compelling power.

3rd. Electricity is not a stimulus, but a sedative, to nerve tissue.

4th. The action of ergot is similar to the above.

5th. The muscular fibres of the middle coat of arteries are similarly related to nerve influence.

6th. Certain drugs affect muscular tissue in accord with the above specified inter-relation between nerve and muscle.

The preceding is a succinct representation of Dr. Poole's theory. No doubt Dr. P. found it difficult to select words adequately representative of the ideas he sought to express, as indeed every writer must do when endeavouring to convey new thoughts in simple conventional terms. We could wish he had conveyed the idea in his first proposition, as to the *regulation* of voluntary muscular action, by some other word than *agency;* for, in our apprehension, the term agency implies activity, not idleness; and regulation implies something other than "masterly inactivity." Again, in his second proposition, the phrase "*restraining-power*," as expressing the negation of nerve action, or the condition of absolute nerve-quiescence, appears to our mental vision somewhat like an Hibernicism. To restrain is to hold back, and to prevent the thing or creature so held from advancing; but who that ever has ridden a hard-mouthed, spirited horse, will say that he has brought him to a halt by letting go the bridle? It surely costs not less exertion to hold him in than to start him; but Dr. P.'s charger is an instinctive thorough-goer, and needs neither whip nor spur. All right, as to the pace; but that restraining non-restraint, rather puzzles us. The problem shows a *missing link*, which will not, we fear, be soon found. These mere technical imperfections, though to be regretted, will not, the reader will find, detract from his appreciation of the book, which, in reality, we regard not only as highly creditable to the author, but as an honour to the medical profession of our Dominion. The extent to which Dr. P. has made citations from the most distinguished authorities renders his book a valuable repertory of physiological and therapeutic science; almost equally useful, in this respect, to the medical tyro and the old practitioner; whilst the logical exactitude, the clearness of diction, and the candour of discussion, which are exhibited throughout, entitle the work to a very respectable rank in the literature of medicine.

As an adventurous and clear-headed native Canadian, who has given abundant proof of his unflagging industry, and his intimate acquaintance with the ablest authorities in the branch of science on which he has written, he well merits the respect and substantial approbation, not only of our profession, but of every lover of our promising young country; and we feel confident that no intelligent physician or student, who procures the book and reads it attentively, will regret the trifling expenditure. If the contained matter do not amply condone for its unpretentious appearance, we are very far mistaken.

The work is dedicated to Joseph Workman, M.D., of Toronto.

Atlas of Skin Diseases. By Louis A. Duhring, M.D. Part V. Philadelphia: J. B. Lippincott & Co. 1879.—Part V. contains plates of Scabies, Herpes Zoster, Tinea Sycosis, and Eczema (vesiculosum). As we have said in reference to Parts I., II., III., and IV., of this Atlas, we have nothing but praise to give in noticing it; the plates in Part V. are excellent in every way. We have seen none to equal them as truthful representations of typical cases of skin disease. The text, as usual, is clear and concise.

"Bryant's Surgery," J. Lewis Smith on "Diseases of Children," Emmet on "Principles and Practice of Gynœcology," "Attfield's Chemistry," "Tellor on Diseases of Live Stock," and Habershon on "Diseases of the Abdomen," will be reviewed next month.

An Introduction to Pathology and Morbid Anatomy. By T. Henry Green, M.D., Lond. 3rd American from 4th Revised and Enlarged English Edition. Henry C. Lea, Philadelphia; Hart & Rawlinson, Toronto.

It is with real pleasure that we greet once more the well-known features of our old friend's face; and, as we grasp him cordially by the hand and welcome him to our shelves again, we cast a rapid glance upon his visage to note the new impressions time has made thereon. The old deep lines of honest thought and work, and many other excellences, are still as clear and unmistakable as formerly, whilst the new furrows which the "corroding tooth" has worn are those indicative of experience matured and knowledge ripened.

In comparison with the first American edition, published in 1871, chapter I. receives an addition at the end devoted to the description of "vacuolation" in the cell; and in chapter III. a section upon pulmonary emphysema has been introduced amongst the "degenerations." The chapters on fatty degeneration and infiltration have been re-written and much augmented, and a new section on brown atrophy of the heart has been added. Amongst the mucoid and colloid degenerations, a section upon the muscular changes in typhoid fever has been introduced. Tissue changes in pyrexia enjoy the distinction of a new chapter in their description. The article on inflammation has been re-written, and advantage has been taken of Cohnheim's more recent researches to prove conclusively that the emigration of blood corpuscles and the exudation of liquor sanguinis are dependent upon "some impairment of the vital properties of the walls of the blood vessels;" Burdon Sanderson's definition of imflammation is here adopted, as "simply the aggregate of those results which manifest themselves in an injured part as the immediate consequence of the injury to which it has been exposed, an injury, it must be borne in mind, which, if of sufficient severity, would have led to its death." A special chapter is here devoted to scrofulous inflammation. Tubercle is in this edition more properly considered in the section on inflammation than in that on "nutrition increased," as before; and a most lucid and admirable chapter on tubercle and acute tuberculosis is here to be found, the portion treating of tuberculosis of the lungs being especially profusely illustrated and clearly written. Then follow two entirely new and excellent articles on pyæmia and septicæmia. Syphilis, too, as its prevalence and importance deserve, receives a more thorough notice in this than in the earlier edition, gummata not being alone considered, as before, but the fibroid changes, and the changes in vessels as illustrated at the recent discussion on visceral syphilis at the Pathological Society of London, also receive attention. The chapter on the inflammation of bone has been re-written, the subjects of periostitis, necrosis, and caries being specifically treated, and new sections added on mollities ossium, and rickets. That on inflammation of blood-vessels has also been re-written and much improved. Myocarditis and fibroid induration of the heart, here, also receive that consideration which they lacked in the earlier edition. In the chapter on inflammation of mucous membranes the author follows Wagner, in this edition, in speaking of fibrous and croupous inflammations as separate instead of identical forms; and he appends a notice of dysentery which was wanting in the first. In referring to inflammation of the liver the term red atrophy is dropped, and the chapter is completed by a short but new notice of acute yellow atrophy. The section on suppurative nephritis is somewhat enlarged in order to include a description of "surgical kidney," and that on tubal nephritis in order to make room for a separate account of scarlatinal nephritis, as has been rendered necessary by Klein's contributions (made in 1877) to our more perfect knowledge of the latter. To the chapter on inflammation of the brain and spinal cord has been appended a brief notice of sclerosis. The chapter on the various forms of inflammation of the lungs has been re-written, extended, and much enhanced in value, and a brief allusion to hypostatic pneumonia has been intercalated. Pulmonary phthisis receives consideration in a special chapter which none should fail to read. An additional notice of mechanical hyperæmia of the liver and lungs will be found amongst the hyper-

æmias. Two entirely new chapters—one on leukæmia, and the other on the preparation and mounting of specimens—conclude the book. In view of the additions made we are persuaded that those who own the older book will not rest satisfied till they possess the new. To the reflecting, busy practitioner it constitutes a remembrancer of pathological doctrines of inestimable value; whilst to the student of medicine of the present day it is "a mine of wealth," and a veritable *sine quâ non.*

Physiology: Preliminary Course Lectures. By J. T. Whittaker, M.A., M.D., Professor of Physiology and Clinical Medicine in the Medical College of Ohio, &c., &c. Cincinnati: Robert Clarke & Co. Price, $1.75.

This is a delightful little book from whose perusal we have derived much pleasure and no little profit. That it will fill a void much felt by students of medicine we have no doubt, and can, therefore, have no hesitation in recomending it most cordially to our readers. It is made up, as its title indicates, of a series of lectures delivered by Dr. Whittaker as a preliminary course to his lectures on physiology at the Medical College of Ohio. Lecture I. has for its subject, "The influence of Physiology upon Practice and upon the Practitioner," and formed the introductory lecture to the course, delivered on the 1st September, 1878. In it he gives an account of many of the superstitions of medicine in olden times, and shows how the growth of the science of physiology dispelled these delusions. He then depicts the characteristics of the true physiologist, taking Harvey and Haller for his types. In Lecture II., the subject of the Conservation of Force is most lucidly and graphically set forth. Lectures III., IV., and V., constitute the best short, concise, and intelligible account of the doctrine of evolution, with which we are acquainted. Lectures VI. and VII. are devoted to Protoplasm and its Properties, and are fully in keeping with the high standard of excellence of their predecessors. "Bone and its Properties" are admirably treated of in Lecture VIII., and "Muscle and its Properties in Lectures IX. and X. To the chapter on Bone we have one exception to take, and that is the perpetuation of the error of the vertebral origin of the cranial bones, generated in the vivid imagination of Goethe and supported on grounds of analogy by Oken. This plausible theory secured the support of the great authority of Owen and of Rathke, and it remained for the genius of a Parker to rebut the error, by incontrovertible evidence. Since the publication of his work on the "Structure and Homologies of the Vertebrate Skull," we thought this time-honoured theory had died a natural death. "Nerve and its Properties" forms the subject of Lecture XI., which is in every respect excellent; and No. XII., the concluding lecture, takes up the subject of "Blood and its Properties." Of this chapter, as of all the rest, we would desire to speak in terms of highest commendation, and there is but one statement in it to which we can raise objection. The author adopts the statement, and gives the figures of Hirt, showing a marked increase in the number of white blood corpuscles after a meal. This is directly opposed to the fact established by Messrs. Cutler and Bradford, in a late number of Michael Foster's Journal of Physiology, who, employing Malassez's method of counting, found an increment of red-blood corpuscles, and a decrease of white after every meal. Of the book, as a whole, we feel that we cannot speak too highly, and in our most heartiwise we recommend it to all students and practitioners of medicine, and to all others who may be desirous of gaining an intelligent insight into the phenomena of nature, as embodied in "the human form divine." The appearance of the book reflects much credit on the publisher—Chancy R. Murray, Cincinnati—it is well and neatly bound, printed in clear, legible type, on very good paper. Comparatively few typographical errors mar the excellence of the text; but, as we hope the book will fall largely into the hands of students, we shall, in conclusion, point these out. The text is illustrated by some twenty-six figures, which admirably fulfil the purpose for which they are designed; and the whole is completed (in both senses) by an excellent and copious index.

We would prefer to see "albuminoid" spelt with an "i" instead of an "e" in the penultimate syllable, as it is here *passim*; "Synonym"

too, would look better with a "y" in its last syllable, in place of the "i." On page 5, "Charlatanry" lacks the second "r." On page 20 "Basle" is written "Basel." On page 75 we find "cloacum" for "cloaca." We must also protest against the use of the word "manifest" for "becomes manifest," at page 100, as also "presents" for "is present," at page 104. On page 120 we find "epidydimus" for "epididymis," and on 1st line of page 122, "ceases" should be "cease." At page 137, "guiacum" would be better "guaiacum." At page 150, and elsewhere, "alveolæ" should be "alveoli," and at page 151, the Greek roots of skeleton should be spelt with a "*kappa*" in both instances, and not a "*chi*." At page 153, we would prefer "nutrient" to nutritious" foramina. At page 164, 7th line from the bottom, "has" should be written "have." In the 8th line, on page 177, the first "in" should be "is." At page 189, "Heidenham" should be "Heidenhain." At page 214, "adipocire" would be better "adipocere." At page 243, "correllation" would be better "correlation." At page 245 "physicial" has one "i" too many in the ultimate syllable.

Epitome of Skin Diseases with Formulæ, for Students and Practitioners. By TILBURY FOX, M.D., F.R.C.P., and T. C. FOX, M.B., B.A. Second American edition; revised and enlarged. Philadelphia: Henry C. Lea, 1879; Toronto: Hart & Rawlinson.

This is a useful little work for reference, or for students and others who have not time to read the larger treatises. It is divided into three parts: Part I. treats of the mode of observing the pathology, classification, cause, diagnosis, and general principles of treatment. Part II. contains the description and treatment of skin diseases, and is arranged alphabetically. Part III. contains a cutaneous pharmacopœia and a diet table. The American editiors have added the classification and nomenclature of diseases of the skin adopted by the American Dermatological Association. The names of the authors are quite sufficient to commend this book, Dr. Tilbury Fox being well known as occupying a place in the front rank of the Dermatologists of the day. It is needless to say anything of the typography of work coming from the house of Henry C. Lea.

The National Dispensatory. By ALFRED STILLE, M.D., LL.D. and JOHN M. MAISCH, Ph.D. Philadelphia: Henry C. Lea, 1879. Toronto: Hart & Rawlinson.

This work seems to be a lineal descendant of the old United States Dispensatory, contains about 1,628 beautifully printed pages with numerous wood-cuts, and embraces all the officinal preparations of the United States and British Pharmacopœias, besides a large number of drugs peculiar to the French Codex. the German Pharmacopœia, and domestic practice.

A careful review amply sustains the high reputation of its authors, who have "devoted themselves to the task of producing a work to which the inquirer may refer with the certainty of finding everything which experience has stored up as worthy of confidence in the subjects embraced within its scope," and we need not assure any one acquainted with the former writings of Dr. Stillé, that the task has been well done.

The alphabetical arrangement enables the inquirer to turn up in a moment anything he wants, while the double index is worthy of imitation, both in comprehensiveness and clearness, and is in pleasing contrast with the jumble called an index in the first three volumes of Ziemssen's Cyclopædia. As a work of reference for the lecturer or practitioner it stands without a rival; but we fear it will not supply the wants of the student as well as its old progenitor.

Our materia medica has always been encumbered by a host of useless and obsolete material, and the tendency of many modern writers and teachers has been to eliminate such from the place they have long held, and only to admit new agents when they have been proven to possess positive properties of value. The authors, however, have felt it their duty to retain everything heretofore found in modern materia medica, whether regular, eclectic, or domestic, and have thereby increased its size without a proportionate increase in its value.

We generally approve of the value placed by the authors on the different agents spoken of; they are not as enthusiastic over the virtues of

salicylic acid as some modern writers appear to be, for while they say it will reduce the temperature and pulse-rate decidedly, in acute rheumatism, it is by no means certain that it removes the disease any better than other remedies, while cardiac complications are in nowise prevented by its use, and relapses of rheumatic inflammation may take place while the patient is fully under its influence. Nevertheless, in fairness, they give the opinion of Dr. Broadbent, who regards it as truly specific.

We do not, however, altogether agree with the authors' low estimate of the hypophosphite, ammonio-citrate, and dialyzed iron, although we *have* heard medical friends express doubts in regard to the activity of the latter. In our own hands, while some samples have proved both useless and unpleasant, that manufactured by Wyeth & Brother has generally produced the desired result, and has been pleasant to take.

We wish the authors had exercised the prerogative, which their high standing in the profession would have justified them in doing, and boldly expunged everything of which they could say, as they have of fungus muscarius, after nearly a page and a half of description, "that at one time this fungus had a doubtful reputation for the cure of epilepsy, but it is no longer used in medicine." Take, for instance, "Bursa pastoris, cephalanthus, dracontium, guano, helianthus, hydrastis, linaria, lycium, lycopus, medeola, myrobalan, and fucus vesiculosus, which occupy eight or nine pages of description, and yet are all pronounced "worthless," obsolete," "forgotten," "abandoned," or "scarcely a medicinal agent."

In an excellent article on the use of quassia, they say it is "especially of use in gastric vertigo, when associated with bicarbonate of sodium." But, with the exceptions referred to, we heartily commend the work to all who feel an interest in the progress of our art, or any desire to learn of the odd freaks indulged in by medical practice in former days. We need only say, further, that the work is got up in the style peculiar to Henry C. Lea, to assure our readers that nothing has been spared to make it worthy the position it must take in every medical library.

Clinical Lectures on Diseases Peculiar to Women. By Lombe Atthill, M.D., Univ. Dublin, &c., &c. Fifth edition. Revised and enlarged, with illustrations. Philadelphia: Lindsay & Blakiston, 1879; Toronto: Hart & Rawlinson.

This is the kind of book we like to read, and we wish there were more like it,—so clear, concise and practical, pleasantly written and beautifully printed, so small that a tired man can take it up without fatigue, and so full of practical detail as to constitute a safe and sufficient guide in treating all the more important and common diseases of women.

"All theory, hypothesis, and speculation are omitted." There is no ambiguity of precept or practice. You know at once what the author means, and you see at a glance what he does and how he does it. He is not afraid to record some failures with his success, and that is what the young gynæcologist needs to encourage him in this difficult branch of medical practice. He does not dwell on useless discussion of the pathology of disease, but takes you right to the bedside of the woman, shows you what ails her, and tells you at once what had better be done. He gives an excellent chapter on the methods of examining the uterus, and in referring to what Sims says of the facility of the bi-manual examination, very justly remarks that when the woman is very fat, or the abdominal muscles very rigid, the uterus will often elude our touch altogether. He strongly advocates the application of nitric acid to the uterine cavity in certain conditions of its lining membrane, but also speaks favorably of carbolic acid, as advised by Playfair.

He does not appear to think as much of the curette in granular conditions of the uterine mucous membrane as Thomas and Mundé, but then nitric acid is his panacea. In our hands, the dull wire curette of Thomas has proved a most satisfactory and useful little instrument, not only in menorrhagia from granular mucous membrane but in abortions during the first and second months, when the membranes do not wholly come away; and although it may not be any less heroic than the nitric acid, we must confess to a weakness in its favour. Dr. Atthill very properly says he looks upon

the injection of fluids into the uterine cavity "as a hazardous practice."

In the treatment of uterine fibroids, the author has apparently observed no benefit from hypodermic injections of ergot, as recommended by Hildebrandt, beyond the partial restraint of hæmorrhage; and, although opposed to surgical interference, yet he has laid open the capsule with the cautery and knife for the relief of pain and bleeding. His remarks on chronic endometritis, cervical and corporeal, are exceedingly practical, and he winds up by saying, "But in truth chronic metritis often proves a most intractable affection." His last two lectures are devoted to uterine therapeutics, and we commend them to the careful attention of all beginners.

The Cell Doctrine: Its History and Present State. By JAMES TYSON, M.D. 2nd edition. Revised, corrected, and enlarged. Philadelphia: Lindsay & Blakiston, 1878.

The author has given us a work that comprises a history of the evolution of the cell doctrine from its origin in the theory of Haller, 1757, down to the present day. The work is chronologically arranged, the various theories that prevailed at different epochs are fairly presented and discussed, and in conclusion the author sums up, giving the present state of the cell doctrine, and states his own views, which are clearly and concisely set forth. He defines the *cell* or *elementary part* as the smallest mass of living *matter possessing the essential life properties of reproduction, nutrition, growth, and development.* To such substance, the terms "sarcode," "protoplasm," germinal matter," and "bioplasm" have been applied. He believes with Max Schultze, Beale, and Leidy, that the intercellular substance and all that part of the cell outside the germinal matter (nucleus) originates by a conversion of the germinal matter or bioplasm at its periphery, and a pushing off of this converted matter by the deposition of new bioplasm within the nucleus. Forty-one pages of bibliography, containing the titles of the books and papers of nearly 500 writers on this subject, show how faithfully the author has investigated the history of the cell doctrine. The work has been well done.

Modern Surgical Therapeutics. By GEORGE H. NAPHEYS, A.M., M.D., ETC. Sixth edition. Philadelphia, D. G. Brinton, 1879.

This work claims to be a "Compendium of current formulæ, approved dressings, and specific methods for the treatment of surgical diseases and injuries." The book contains 572 pages, and the material is taken from about 650 surgical writers. Of course it was impossible to do full justice either to the surgeons or the science of surgery within such small space; but the author has endeavoured, with fair success, to give an analysis of the plans of treatment followed by the best surgeons, together with a number of formulæ for each disease or injury.

Among the chapters especially worthy of notice are the following: Anæsthetics, general and local; the various dressings of wounds, including the antiseptic; lesions of the urinary organs, giving the methods of treatment by Sir Henry Thompson, Gross, Van Buren, Niecmeyer, Ricord, and various other well-known authorities; diseases of the skin, giving the general therapeutics, together with prescriptions for all the ordinary diseases of this class, taken principally from English, American and German sources. There is, however, such a uniformity in the plan of all the chapters that further special mention is unnecessary.

We should feel sorry to see any of our many treatises on surgery, or any of its branches, neglected in the slightest degree for such an unscientific work as this; but, at the same time we can recommend it as a valuable book for reference, especially to the general practitioner, whose library may not contain all the standard surgical works now extant.

A Manual of Examination of the Eyes.—A course of lectures delivered at the "Ecole Pratique," by Dr. E. Landolt, Directeur Adjoint of the Ophthalmological Laboratory at the Sorbonne, Paris. Translated by Swan M. Burnett, M.D. Philadelphia, D. G. Brinton, 115 South Seventh Street, 1879.

The thorough examination of the eyes involves more than is generally supposed, and covers the following points elaborated by the author, viz.: 1st. The objective general exam-

ination of the eye (and patient). 2nd. Examination of the lids conjunctiva, lachrymal passages, and all the other portions of the organ accessible to the naked eye. 3rd. Determination of the distance between the two eyes, their height and protrusion. 4th. The move ments of the eyes, particularly in their relation to strabismus. 5th. Intra-ocular tension. 6th. Acuteness of vision. 7th. Refraction and accommodation. 8th. Perception of colours. 9th. Limits of the visual field and indirect vision. 10th. Ophthalmoscopy, including oblique illumination. These subjects are treated in a lucid and painstaking manner in twenty-four lectures, forming a handsome volume of over three hundred pages; but for the general practitioner a work embracing both diagnosis and treatment of diseases and defects of the eye, would be more serviceable.

American Health Primers. Edited by W. W. Keen, M.D., Fellow College Physicians, Philadelphia.—It is the object of this series of American Health Primers to diffuse as widely and as cheaply as possible, among all classes, a knowledge of the elementary facts of Preventive Medicine, and the bearings and applications of the latest and best researches in every branch of Medical and Hygienic Science. They are not intended (save incidentally) to assist in curing disease, but to teach people how to take care of themselves, their children, their pupils, and employés.

The series is written from the American standpoint, and with especial reference to our Climate, Architecture, Legislation, and modes of Life; and in all these respects we differ materially from other nations. Sanitary Legislation especially, which in England has made such notable progress, has barely begun with us, and it is hoped that the American Health Primers may assist in developing a public sentiment favourable to proper sanitary laws, especially in our large cities.

Dr. W. W. Keen has undertaken the supervision of the series as Editor, but it will be understood that he is not responsible for the statements or opinions of the individual authors.

The volumes will be 16mo. in size, neatly printed on tinted paper, and bound in paper covers. Price, 30 cents; flexible cloth, 50 cents. Lindsay & Blakiston, Publishers.

An Atlas of Human Anatomy, illustrating most of the ordinary dissections and many not usually practised by the student, accompanied by an explanatory text. By Rickman John Godlee, M.D., F.R.C.S. Part II. Price, $2.50. Philadelphia: Lindsay & Blakiston.

This second part of Godlee's Atlas contains plates of dissections of the head and neck, many of them showing the parts exposed in a manner not usually practised by the student. We can add nothing to the favourable opinion we gave in noticing Part I. No one wishing anatomical plates can get any more accurate or artistic.

The Transactions of the American Ophthalmological Society. Twelfth, Thirteenth, and Fourteenth Annual Meetings, 1876–77–78. Like the previous Reports of the Society, this forms a valuable contribution to ophthalmic literature.

The Second Annual Report of the Board of Trustees of the Western Pennsylvania Institution for the Instruction of the Deaf and Dumb, for the year ending Sept. 30th, 1878. Pittsburgh: Stevenson, Foster & Co. 1879.

The Diseases of Live Stock and their most Efficient Remedies; including Horses, Cattle, Sheep, and Swine. By Lloyd V. Tellor, M.D. Philadelphia: D. G. Brinton, 115 South Seventh Street. 1879.

The Treatment of Dropsy of the Gall Bladder by Operation (Cholecystotomy), with Notes of a Successful Case. By George Brown, M.R.C.S., L.S.A. London: Ballière, Tyndall, & Cox.

Opium as a Tonic and Alterative and its Hypodermic Use in the Debility and Amaurosis sometimes consequent upon Onanism.—By R. H. Pope, M.D., New Orleans.

Report of the Medical Superintendent of the Asylum for the Insane, Toronto, for the year ending September, 1878.

Diphtheria: its Nature, Causes, Prevention, and Treatment. By J. H. Kellogg, M.D., Battle Creek, Michigan.

The Non-Asylum Treatment of the Insane. By William A. Hammond, M.D. New York: G. P. Putnam's Sons. 1879.

Oyster-Shuckers' Corneitis. By W. J. McDowell, M.D., Baltimore.

OBITUARIES.

Dr. John M. Woodworth, Supervising Surgeon-General of the United States Marine Hospital Service, died on March 16th.

Prof. Gormenschein, the celebrated Prussian Chemist, died last month.

APPOINTMENTS.

Dr. Roberts Bartholow, of Cincinnati, has been elected to the Chair of Materia Medica and Therapeutics in Jefferson Medical College, in place of Dr. J. B. Biddle, deceased.

E. McNichol, of the town of Cobourg, Esq., M.D., has been appointed to be an Associate Coroner in and for the United Counties of Northumberland and Durham.

Intestinal Depletion *versus* Bleeding in Uræmic Nephritis.

M. de Cérenville has had occasion lately to compare the effect of *intestinal depletion* and that of *bleeding* in uræmic nephritis. He had two cases, completely analagous, of scarlatinal nephritis in young persons of 18 and 19 years of age respectively, affected at the same epoch with acute nephritic complication. In one of the cases drastics were employed: 60 grammes (℥ij) of compound tincture of jalap, administered in two doses, produced abundant intestinal depletion, which, however, did not prevent death occurring shortly afterwards. At the autopsy the kidney was found of large type, and a not far advanced nephritis existed. The other patient was bled twice, and each time 200 (℥vj) grammes of blood were taken: the next day amelioration was already manifest, and complete recovery followed.—*Lyon Médical.*

Miscellaneous.

Dr. John Hutton Balfour has resigned the chair of Botany in Edinburgh University, owing to ill health.

Ontario Medical Council Annual Examinations.—Over two hundred and seventy students presented themselves in the different years.

Royal College Physicians and Surgeons, Kingston.—The regular session of this institution terminated on Friday, March 21st, when Dr. M. Lavell, Professor of Obstetrics, delivered an able and eloquent valedictory, replete with wholesome advice and instruction. The address met with a most hearty reception from the students.

Test for Organic Matter in Water.—Put some of the water into a clean, glass-stoppered bottle; add a little pure cane-sugar; expose, having well stoppered the bottle, to the light in a warm room. Should the water, even after a week's exposure, become turbid, it is dangerously impure for drinking; if it remain clear, it is safe. This is Heinsch's sugar-test.

The cost of beds in the Paris hospitals is given as follows: At the Hôtel Dieu, with 514 beds, the annual expense per bed is 1,194 francs; and at La Charité, with 472 beds, it is 1,096 francs. The Clinique, with 74 beds, is the hospital which costs most, viz., 1,847 francs per bed: and the Ménages, with 1,387 beds, is the hospice which costs least, viz., 399 francs per bed.

Coffee and Egg for Sick Persons.—A sick person, wanting nourishment and having lost appetite, can often be sustained by the following, when nothing else could be taken: Make a strong cup of coffee, adding boiling milk as usual, only sweetening rather more; take an egg, beat yolk and white together thoroughly; boil the coffee, milk, and sugar together, and pour it over the beaten egg in the cup you are going to serve it in. This simple receipt is used frequently in hospital practice.

Trinity Medical School.—The annual examinations in this institution recently took place, when the following gentlemen passed their examination :—Primary—Mearus, second year's scholarship. Certificates of Honour—Messrs. R. Wilson, M.A., Martin, and Hatton. Also Messrs. Ellis, Chappell, R. McWilliams, J. E. Shaw, and J. McWilliam. Mr. McNaughton passed in Anatomy, Physiology, and Botany, and Mr. Lundy in Anatomy and Physiology. The Final Examination—Mr. Chappell, Trinity Gold Medal; McDiarmid, Medical Faculty Gold Medal; Thuresson, Medical Faculty Silver Medal; Duck, Certificate of Honour; Welford, O'Gorman, A. J. Geikie, and Parke. First Year's Examination—W. F. Peters, 1st year's scholarship; Ferrier, 2nd first year's scholarship; Urquhart, M. L. Cameron, and Woolverton.

Method of Mounting Specimens for Temporary Preservation.—Dr. John C. Dalton, the eminent physiologist, reported to the New York Academy of Medicine, at its last session, a new method of mounting sections of the human body, by which they might be preserved for several days, without losing their natural form or color, so as to admit of their being examined at leisure, or used for purposes of demonstration. The sections, which may be made of any desired size or thickness, are embedded, à *la boned turkey*, in warm fluid gelatine, and encased between glass plates. Dr. Dalton exhibited, and passed around for inspection, transverse sections of a human brain thus mounted, in which the natural features of colour, etc., were perfect. There was no evidence of shrinking or other change; the relations of the gray to the white matter were as clear as in perfectly fresh specimens: and the various ganglia, convolutions and sulci were shown as satisfactorily as immediately after a dissection. Specimens of other portions of the body, whether normal or abnormal, can thus be preserved, and if carefully mounted the package can be handled without fear of injury, and even transported for long distances for examination by experts. The report was regarded as a highly valuable one, and Dr. Dalton received for it a vote of thanks from the Academy.—*North Carolina Med. Jour.*

Toronto Medical Society.—This Society terminated its first year of existence on April 17th. On that occasion Dr. I. H. Cameron read an exhaustive paper on Pelvic Hæmatocele. The following morbid specimens were exhibited: — Tubo-uterine gestation, by Drs. Cameron and Senkler; Rupture of liver and gall bladder, by Dr. Oldright; Contracted and inflamed stomach, by Dr. Riddell; Two specimens of aortic valvular disease, by Dr. Graham; Apoplexy of the lung, Dr. Graham; a heart with mitral disease, and *four* perfectly formed pulmonary semilunar valves, granular kidney from the same case; uterus and kidney from a case of puerperal pyæmia, showing abscess in the ovary, and embolic abscesses in the kidney, lungs showing chronic cheesy pneumonia with immense cavities, by Dr. Zimmerman. The meetings of the Society have been held fortnightly during the year. Many interesting papers have been read and discussed, and a large number of pathological specimens have been exhibited. Papers were read on Infants' food, "Summer diseases of children," "Retained placenta." The more common forms of skin disease, "Endometritis," "Antiseptic surgery," "Diphtheria," "Rest in the treatment of wounds," "The early symptoms of insanity," "Cerebro-spinal meningitis," "Puerperal convulsions," "Typhoid fever." Metalotherapy and metaloscopy, "An anomalous case of uterine disease," "Pelvic cellulitis," "Endothelioma of intra-vaginal space of the optic nerve," "Graves' disease," "Uncommon symptoms in Bright's disease," "Hysterical rhythmical chorea," "Paresis," "Plastic surgery," "Placenta prævia, with symptoms of carbolic acid poisoning following injection of a solution into the rectum," "Fracture of sternum." The following pathological specimens were shown: Several cases of valvular disease of the heart, "Ulcer of the stomach," "Polypus uteri," "Cirrhosis of liver," "Thrombosis of superior longitudinal sinus," (two cases); "Abscess round the urethra," "Chronic gastritis," "Common carotid artery ulcerated after ligation," "Large white kidney," "Contracted granular kidney," (several cases); "Traumatic rupture of intestine," "Lung in grey hepatization," "Rupture of uterus,"

"Intussusception," "Hydatiform degeneration of chorion," Ruptured intestine from ulceration," "Specimen of Colles' fracture and dislocation of head of femur with formation of a false accetabulum," "Urethral calculus," "Polypus of heart," "Diaphragmatic (congenital) Hernia."

McGill College Faculty of Medicine.—The total number of students enregistered in this Faculty during the past year was 166, of whom there were, from Ontario, 87; Quebec, 53; Nova Scotia, 3; New Brunswick, 7; P. E. Island, 3; Newfoundland, 1; United States, 14. Out of 50 candidates who presented themselves, the following gentlemen, 40 in number, have passed their Primary Examinations on the following subjects: Anatomy, Chemistry, Materia Medica and Pharmacy, Institutes of Medicine and Botany and Zoology: N. Ayer, T. L. Browne, Charles N. Beer, P. Cameron, F. W. Church, J. Cahalan, D. K. Cowley, G. O. Dibble, J. S. Edwards, E. C. Fielde, H. D. Fraser, W. L. Gray, H. E. Heyd, H. A. Higginson, A. Henderson, G. E. Josephs, E. J. Laurin, W. A. Lang, R. L. Maas, L. D. Mignault, B.A., M. C. McDonald, J. A. McDonald, R. T. McDonald, K. Mackenzie, B. E. Mackenzie, B.A., D. C. McLaren, B.A., E. A. McGannon, T. A. O'Calaghan, B.A., A. F. Pringle, F. W. Pulford, G. T. Ross, J. W. Ross, A. M. Ruttan, B. L. Riordan, E. J. Rogers, J. Stewart, F. W. Serviss, E. H. Smith, W. H. Snow, R. B. Struthers. W. C. Perks has passed the written, but owing to illness was unable to present himself for the oral, examination. Out of 43 candidates who presented themselves, the following gentlemen, 37 in number, fulfilled all the requirements to entitle them to the degree of M.D., C.M.: J. L. Brown, Henry J. Burwash, Billa F. Butler, Philip E. Carman, John B. Carman, Murdoch Chisholm, William Case, Thomas Gray, George H. Groves, David F. Gurd, George C. Hart, Franklin Hanna, Alfred J. Henwood, Andrew W. Imrie, J. L. Irwin, Joseph A. Jackson, Chas. J. Jamieson, John B. Lawford, John M. Lefebvre, Hoyes W. Lloyd, Chas. C. Lyford, John A. McArthur, Oscar J. McCully, M.A., George McCullough, William J. McGuigan, Stuart McNee, John B. Nenzies, Oscar H. Riley, M. C. Rutherford, John G. Scott, Maurice M. Seymour, William F. Shaw, John Smith, Richmond Spencer, W. R. Sutherland, Clarence A. Weagant, Hedley V. Williston, M.A. Frank Buller, M.D., M.-R.C.S., Eng., Lecturer on Diseases of the Eye and Ear, receives the degree in course. The Holmes Gold Medal was awarded to John B. Lawford of Montreal. The prize for the Final Examination was awarded to A. W. Imrie, Spenceville, Ont. The prize for the Primary Examination was awarded to John Andrew McDonald, Panmure, P.E.I. The Sutherland Medal was awarded to W. L. Gray, Pembroke, Ont. The following gentlemen arranged in the order of merit, deserve honourable mention:—In the Final Examination. Messrs. Shaw, Gray, Sutherland, and Williston; in the Primary Examination, Messrs. Josephs, W. L. Gray, J. W. Ross, Beer, Rogers, Henderson, R. B. Struthers, and Heyd. Professors' Prizes: Botany, H. V. Ogden, B.A., St. Catherines, Ont.; Practical Anatomy, Demonstrator's Prize, in the Senior Class, awarded to Chas. N. Beer, of Charlottetown, P.E.I. Junior Class prize awarded to James Ross, B.A., Dewitville, Q. Practical Chemistry prize, William Moore, Derby, Ont.

Births, Marriages, and Deaths.

BIRTHS.

At Toronto, on March 28th, the wife of Dr. A. H. Wright of a son.

At Toronto, on March 18th, the wife of W. Oldright, M.A., M.D., of a daughter.

In Tara, on March 17th, the wife of N. Washington, M.D., of a son.

At Toronto, on April 17th, the wife of Dr. R. B. Nevitt of a son.

MARRIAGES.

In London, on April 14th, T. S. T. Smellie, M.A., M.D., to Janet Eleanor, elder daughter of the late Wm. Laurie, Esq., of Port Dalhousie.

DEATHS.

At Berlin, on March 13th, the wife of G. W. Wright, M.D.

At Watford, on March 17th, the wife of Dr. U. M. Stanley, aged 19.

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THE rapidly increasing demand for our IMPROVED EXTRACT OF MALT, during the four years that it has been manufactured and offered to the Medical Profession in America, justifies the belief that in its production here we are meeting a generally felt want.

Long experience in manufacturing Malt Extract has enabled us to completely overcome the many difficulties attending its manufacture in large quantity; and we positively assure the Profession that our Extract of Malt is not only perfectly pure and reliable, but that it will keep for years, in any climate, without fermenting or moulding, and that its flavour actually improves by age. Our Extract is guaranteed to equal, in every respect, the best German make, while, by avoiding the expenses of importation, it is afforded at less than half the price of the foreign article.

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IT REPRESENTS THE SOLUBLE CONSTITUENTS OF MALT AND HOPS,

Viz.: Malt Sugar, Dextrine, Diastaste, Resin and Bitter of Hops, Phosphates of Lime and Magnesia, and Alkaline Salts.

Attention is invited to the following analysis of this Extract, as given by S. H. Douglas, Professor of Chemistry, University of Michigan, Ann Arbor.

"TROMMER EXTRACT OF MALT CO: I enclose herewith my analysis of your Extract of Malt:

"Malt Sugar, 46.1; Dextrine, Hop-bitter, Extractive Matter, 23.6; Albuminous Matter (Diastase), 2.469; Ash—Phosphates, 1.712; Alkalies, .377; Water, 25.7; Total, 99.958.

"In comparing the above analysis with that of the Extract of Malt of the German Pharmacopœa, as given by Hager, that has been so generally received by the Profession, I find it to substantially agree with that article.

"Yours truly, SILAS H. DOUGLAS,
"Prof. of Analytical and Applied Chemistry."

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The very large proportion of *Diastase* renders it most effective in those forms of disease originating in *imperfect digestion of the starchy elements* of food.

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(See Transactions of American Medical Association, for 1876, page 176.)

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THE

Canadian Journal of Medical Science.

A MONTHLY JOURNAL OF BRITISH AND FOREIGN MEDICAL SCIENCE, CRITICISM, AND NEWS.

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TORONTO, JUNE, 1879.

Selections: Medicine.

ACUTE EXACERBATION OF CIRRHOTIC KIDNEY, WITH PERITONITIS AND PLEURISY, SIMULATING TYPHOID FEVER.

BY J. M. DACOSTA, M.D.

This is a case in which there is an element of doubt as to whether it belongs in the series; but let us consider it further. The boy was admitted in a state of collapse. He was taken sick in the ship six weeks ago, and he has been on shore for four weeks. He had diarrhœa, which continued until a few days before admission, lasting, therefore, at least six weeks. It was persistent, and has since returned. Scybala and mucus, but no blood, were noticed in the discharges. Three weeks ago he had epistaxis; he never had delirium, but he had fever, and was confined to bed ever since leaving his ship. Therefore, for weeks, even prior to his admission to the hospital, he was confined to bed. He had headache almost all the time. Three weeks before admission great prostration began, with swelling of the abdomen, and the parts were tender. When he entered the ward the pulse was 120, respiration 128, and temperature 100. He was so collapsed after being brought here that an accurate physical examination was impossible. But we recognized peritonitis; also right-sided pleuritic effusion, with partial consolidation of the lung. We tested the urine, and found it contained albumen to a moderate amount (about one-twelfth). But under the microscope it showed a large number of granular casts; some of them were fatty.

This, then, is the record prior to your seeing him this morning. But you find him here in very much better condition than when I first saw him. He is now quite over his collapse. This was accomplished by steady stimulation and a moderate use of opium. Although the temperature was as high as 106°, it has now declined to 101° this morning. He has still the fever-pulse, but it is of much better volume. His abdomen is still somewhat tender and large, but nothing like what it was, nor so distended; the peritonitis is clearly passing away. The heart sounds are feeble, or, to speak more correctly, the first sound is short and sharp, like the second sound, but no murmur exists. Examining the back of the right lung, which I told you had been so congested, we find it is somewhat dull on percussion, but the respiratory murmur is heard tolerably low down; it is evident that the lung is still somewhat congested, but the effusion has largely disappeared.

What is the matter with this patient? Two things might be supposed; two perfectly tenable views might be advanced. And in the absence of a distinct history, which it was impossible to get here, we must choose between these two; either the patient has had typhoid fever, with peritonitis, and the lung complication of typhoid fever, and the kidney complication of typhoid fever, or he has not had anything of this kind, but has had a kidney disease of long standing, with pleuritic and abdominal effusion as a consequence. Between these it is difficult to decide. And I will discuss them, premising that the difficulty is so great that we may chance to be wrong in our conclusion. This doubt will arise in any case,

however simple, where we do not know the early history. I believe that it is not a case of typhoid fever. I believe that the view that it is a case which had its root in the kidney disease, with peritonitis and pleurisy super-added, is the correct one. You will say, there is the epistaxis, headache, fever, and the age of the patient. These are all strong points in favour of typhoid fever. You may even say that the congestion of the lung was in favour of typhoid fever, but I still think that the balance of evidence is in favour of the other view.

Let us take these points up for discussion. First, the epistaxis. This we find did not happen till he had been ill three weeks. Please mark this. This is not the kind of epistaxis we have in typhoid fever; it is an early symptom in typhoid, not a late one. Therefore, the time of the occurrence is very important. But epistaxis is also a symptom of Bright's disease. It appears in Bright's disease when the kidney disorder is chronic, and when an exacerbation occurs in the course of the chronic malady. The epistaxis, in the present case, then, admits of this explanation.

Now, for the peritonitis. Does this happen in typhoid? Yes. In Bright's disease? Yes; not unfrequently. But when does it happen? Peritonitis in typhoid occurs with the acute symptoms; peritonitis without perforation is so rare that its possibility has been denied. I will not say so, but will state that, as a rule, it happens after perforation, coming on directly. It was not so here. In typhoid fever it is very unusual to see a case of peritonitis of gradual development. Then the course which the peritonitis has taken is against this view.

Let us turn to the other side of the question. Does peritonitis happen in Bright's disease? It does, at times, and in a very chronic form, and is part of the influence upon serous membranes peculiar to Bright's disease. That such an influence exists in the present case is shown by the co-existing pleuritic effusion. So you see that the case can be explained on the supposition that it is Bright's disease, as well as that it is typhoid fever, and rather better by the former than the latter.

Now, the kidney. You will say that the examination of the urine settles the question. The casts show that it is a case of Bright's disease, and not typhoid fever. But kidney disease may happen as a consequence of typhoid fever. You will not, therefore, be able to lay much stress upon it in the diagnosis. This is the least valuable point in the argument, although we must admit that it is a point. But when I look at the urine report, I find the amount of the albumen moderate, and the tube casts are granular and fatty. Now, a moderate amount of albumen happens in a kidney complication of typhoid fever, but it also happens in some of the chronic forms of disease of the kidney, just as in one of the preceding cases I have shown you, where there was granular contracting kidney. I lay particular stress upon the microscopic appearances, the granular and fatty tube casts. These microscopic appearances are in favour of old kidney trouble, rather than the acute kidney complications, such as would occur in typhoid fever. This is the one point in the case that shows the existence of old kidney disease. In typhoid there are small amounts of albumen and few epithelial casts. The granular and fatty casts belong to old Bright's disease.

I have endeavoured to show you that this may, after all, belong in my series. He has been taking five drops of laudanum ever hour, with reference to the peritonitis, turpentine stupes and subsequent blistering, and he had enough stimulant to sustain him, half an ounce every two hours, which was found to be absolutely necessary.

Now, what change shall be made in his treatment. You see him better as regards the peritonitis; the pleurisy I have already referred to as having disappeared. Shall we go on with the opium treatment, though, perhaps, not pushing it as actively as before? On account of the Bright's disease my opinion would lead me to discontinue it, as we run a risk of checking the secretions of the kidneys and of producing uræmic convulsion. You remember that I told you that in kidney disease opium must be given with great care. As he is getting so much better, I will reduce it to five drops every third hour, and discontinue it as soon as possible. A blister shall be applied to the right side, followed by poultices. We will

also give him ten drops tincture digitalis every three hours, partly to control the circulation and partly to act on the secretions. As he still has diarrhœa, we will give him a suppository of five grains tannic acid and one grain opium, morning and evening.—*Medical and Surgical Reporter.*

DIFFERENTIAL SYMPTOMS OF MULTIPLE CEREBRO-SPINAL SCLEROSIS AND PARALYSIS AGITANS:

MULTIPLE CEREBRO-SPINAL SCLEROSIS.	PARALYSIS AGITANS.
First appearance at the age of 20--45 years.	Always after 55 years.
Commences with vertigo, uncertainty of gait, psychical disorders, headache.	No brain symptoms.
This is followed by paresis and paralysis, to which later the shaking is added.	Begins with fine tremor, after whose existence for some time gradual impairment of motion sets in.
Impairment of sight, nystagmus and impairment of speech.	No such symptoms.
Rarely ever, and then very mild, sensory disturbances.	Always disturbances of general sensation.
Apoplectiform attacks, gastric crises.	No such symptoms.
Tremor consists of long oscillations, real shaking.	Tremor resembling very small, fine oscillations.
Shaking only on motion.	Trembling constant, not specially influenced by motion.
Disappears in recumbent position totally.	Does not change by position.
Head always affected.	Head never affected.
Bulbar symptoms.	None.
Bladder and rectum always implicated.	Never affected.
Occasional sudden disappearance of all the symptoms for greater or lesser time.	Continuous to death from other cause.
Always fatal.	Does not seem to influence duration of life very much.

—*Medical and Surgical Reporter.*

JABORANDI IN PUERPERAL CONVULSIONS.—In a report and analysis of six cases of puerperal convulsions treated by jaborandi, Dr. Fordyce Barker concludes that its utility in the treatment of puerperal albuminuria is more than doubtful, and that after puerperal convulsions its depressing influence and action, which is continuous and exhausting, prevents sleep and the repose of the nervous system, and thus renders it in these cases an unsafe and dangerous remedy.

Surgery.

TREATMENT OF ANGULAR CURVATURE OF THE SPINE BY A PLASTER-OF-PARIS JACKET APPLIED IN THE RECUMBENT POSTURE.

BY THOMAS JAMES WALKER, M.D., LOND.
Surgeon to the Peterborough Infirmary.

* * * * * * *

I will now proceed to demonstrate the manner in which I apply it in the recumbent posture; a proceeding for which I claim these advantages. The diseased bones are, at least, as perfectly relieved from pressure, the muscles are as completely relaxed, and the deformity is as much diminished when the patient lies flat on a bed as when he is suspended. These conditions are obtained without risk of injury, without terror, distress, danger of syncope, or any inconvenience to the patient; and a perfect jacket fixing the spine in the proper position for cure can be applied by the surgeon in his own consulting-room or in the patient's house, be it ever so small a cottage, without the help of any skilled assistant, and without a splash of plaster on his clothes, or even on the floor.

As I have elsewhere described, I formerly moulded the gutta-percha jackets by using a modification of the many-tailed bandage, and it is only on the same principle that a plaster-of-Paris jacket can be applied with the patient in a recumbent posture.

The best lining for the jacket is this closely fitting under-shirt recommended by Sayre. I have used occasionally a flannel bandage applied round the patient, or a sheet of cotton-wadding tacked like a shirt round the trunk, both of them being very imperfect substitutes for the vest. The bandage should be of muslin; those I generally use are torn from a piece of Victoria lawn, nine yards long; the width must vary from two to four inches, according to the size of the patient. Plaster-of-Paris mixed with water alone, sets too quickly to admit of the necessary proceedings, and we must, therefore, add some material to retard the process of setting; the best, I believe is the ordinary gum, and the materials

must be used in the exact proportions of one pound of freshly baked plaster, one ounce of mucilage of gum acacia (*B.P.*),* and eight ounces of water; with plaster mixed in these proportions, there is sufficient time to go through the details necessary to apply the jacket, and it will set firmly in from ten to fifteen minutes after it is applied. I now employ the bandages rolled with dry plaster as recommended by Sayre, placing them in the water and mucilage until they are sufficiently soaked. (Slips of bandage previously torn to the proper length may be steeped in the plaster mixed as directed above, then taken out, and with the help of an assistant, smoothed and laid in position on the bed.) The bandage thus charged with wet plaster has now to be cut into slips of the length necessary to wrap round the patient's back, meet in front, and fold over for a few inches, and these slips have to be placed in proper position on the bed and in suitable layers for folding round the trunk of the patient so as to form a jacket reaching from below the crest of the ilium to the axilla. I, therefore, measure round the patient's chest, and take the depth of the jacket from the axilla to half an inch below the anterior spine of the ilium, and mark these dimensions on the bed, which I have protected by laying a few sheets of paper upon it. My assistant taking the end of the bandage, I rapidly unroll it across the bed, and with scissors divide it at the appropriate length, leaving the slip lying across the bed; the nurse again taking the end, places it so that the bandage as again unrolled shall overlap two-thirds of the slip previously laid down; I again cut it off at proper length, and we repeat the process until a layer of slips of bandage, each overlapping the other two-thirds of its width, is laid across the bed, of sufficient size to reach from the hip to the axilla. This will only give a jacket of the thickness of three layers of muslin, which is not sufficient; I therefore begin again at the bottom with the fresh bandages, first placing a narrow slip of paper across the bottom layer at each side, so as to prevent my confusing the ends of the bandages in the two layers during the next stage of the application. If I wanted a specially strong jacket for an active adult, I could repeat the process again, so as to form a third layer; but usually, if the bandage be well saturated with plaster, a thickness of six folds is sufficient, and, as each slip of bandage overlaps two-thirds of the one below it, this is obtained with two such sets of overlapping bandage.

The patient, who is stripped and clothed in the vest which is to form the lining of the jacket, will now lie down on the bed. I place him carefully, so that the edge of the jacket may come well below the crest of ilium and not rest upon the bone; he raises his arms and lays them in such a position that the elbows shall just clear the top of the jacket (in the case of a female, the breasts must be held up, and pads of cotton-wool placed so as to mould the plaster in a proper form to receive the breasts when the pads are removed), and lies down on the strips of bandage; I now take one end of the last slip laid down, while my assistant takes the other, and bringing them smoothly round the side we cross them tightly over the chest; we repeat this with each slip until we come to the bottom of the first layer; then, lifting the slips of paper placed to distinguish the two layers, we commence again with the bottom stratum, smoothing the whole over with what wet plaster remains. I have never found it necessary to use what Dr. Sayre calls the dinner-pad. The patient may now put his arms down, that I may, if I find it necessary before the plaster has set, cut away or fold over the edge under the arms; in the same way, I fold up the ends of the lower slips of the bandage, and cut away the lower edge of the jacket if I find that it is so low that it will catch the thigh of the patient when he sits down. From the folding over of the slips in front, the jacket is at this point twice as thick as at any other; it has a strong wide rib down the front, which is the point at which it should be strongest to resist the tendency of the spine to curve forward; should it be thought desirable, it is easy to strengthen the back by placing a few strips of well-charged bandage vertically

* Some surgeons who saw this demonstration complain that the plaster sets too quickly. This is owing to there being insufficient gum, the mucilage not being thick enough.

down the middle of the jacket before the patient lies down upon it, or by pouring in a little wet plaster between the layers of bandage.

You will observe that the addition of the mucilage has given me ample time to complete the jacket, but all must be done with a certain degree of rapidity, or the plaster on the first slips laid down, which are, of course, the last to be folded round, will be found to have set. In a few minutes, the lad will be able to get up, the jacket being completely hardened, and you will see that the spine is fixed in its straightened condition as completely as it would have been if the boy had been suspended by his head instead of resting easily on his back.

I do not propose to detain you by entering into any account of the cases to which the method I have demonstrated is applicable; but I may state that I believe it to be adapted to every case in which Sayre recommends suspension; the jury-mast can be fixed as well in this way as by suspension; and the direction in which the slips of bandage are laid and folded may be modified according to the situation of the disease. Even in lateral curvature, the spine is much straightened, and the twisting remedied when the patient is laid either supine or prone; and what is gained in straightness, and consequently in height, may be retained by such an application of the plaster-shell as I have shown.

Although my demonstration is intended only to illustrate the application of the apparatus in spinal cases, the practical surgeon will see at once that the method of applying by a many-tailed bandage plaster-of-Paris, the setting of which has been delayed by the addition of mucilage, may be available in many other cases where a solid immovable retentive apparatus is required.

In conclusion, I would thus summarise the points which I wish to impress upon you by my demonstration, and the remarks with which I have accompanied it.

1. The main object of the treatment of angular curvature of the spine should be the maintenance of the affected bones and joints in a state of absolute rest, and that in the position most favourable for the cure of the disease without deformity.

2. This position is found when the patient is placed comfortably in a recumbent posture.

3. By the application of a plaster-of-Paris jacket, as recommended by Sayre, the bones may be fixed in this position, so as to retain it when the patient rises and moves about.

4. The only way in which such a jacket can be applied with the patient recumbent, is by the method which I have demonstrated.

5. This method depends for its practical facility on the application of the many-tailed bandage and the use of plaster-of-Paris mixed as I have directed.

6. The adoption of the recumbent posture dispenses with the inconvenience and serious risks of suspension, while all the advantages of Sayre's method are secured for the patient at a minimum of trouble to the surgeon.—*British Medical Journal.*

AMPUTATION AT THE HIP-JOINT BY A MODIFIED METHOD.

(Under the care of Mr. Furneaux Jordan.)

A youth of sixteen years had had acute and extensive periostitis of the left femur. Several attempts had been made at various times to remove the dead bone, but the results had not been satisfactory. A few sinuses had refused to close, the limb remained useless, the hip-joint was involved (the thigh was quite immovable, and no tendons could be made tense under anæsthesia), and the general health was reduced to the lowest ebb. It was clear the patient, left to himself, had not long to live. After much consideration it was deemed desirable to amputate at the hip-joint, and to use every precaution against shock and hæmorrhage. A tourniquet was put over the external iliac artery, the limb having been exsanguined as completely as possible by Esmarch's elastic bandage and by position. A straight incision was made, and the trochanters and upper part of the shaft were freed from their muscular attachments, after which the capsule was opened, and some early, but unmistakable, bony union was broken through. Next the shaft was cleared downwards from all its attachments (which are here mostly loose and

cellular) for a considerable distance, and then a few free sawing movements, with a long-bladed knife, through the thigh from which the bone had been removed, ended the operation. The integuments were simply drawn upwards, and the soft parts were cut straight through. No bone being left, the muscles quickly retracted, and were easily covered by the skin. Very little blood was lost. The larger trunks were tied with catgut. It was so important to save every drop of blood, that some oozing between the acetabulum and the gluteal region was instantly checked by putting a sponge, soaked in terebene, on the parts, and leaving it within the wound. Adjustment was effected by deep silver sutures. The stump was then dressed by two large sponges (subsequently kept moist with terebene and water), firmly and evenly held in place by broad long strips of plaster, one strip being so carried over the opposite shoulder that the two ends overlapped the stump. The improvement was so sudden and marked that the next day he said he was "very well." There had been neither shock nor hæmorrhage. The "interior" sponge was left for three days. When the dressing was undone the whole stump had united, even over the sponge, the united parts requiring to be partially broken through for its removal. The later steps of progress were as favourable as the earlier.

Remarks.—Mr. Furneaux Jordan said that the principle of the operation which he had done now, and on previous occasions, might be thus described :—First enucleate the bone, then cut through the limb at any desired spot—the middle of the thigh, or below, or even near the knee. Compared with the ordinary operation of two large flaps, the wound was less severe, the cut surfaces were less extensive, and, in a manner, further removed from the trunk; it was followed by less shock, less hæmorrhage, less opportunity for septic infection. The vessels were more easily dealt with. The thigh might be simply cut through with a circular sweep or a few free sawing movements. The boneless thigh should be firmly held, and somewhat flattened if cut across. The muscles may be cut on the same level as the skin; the bone being absent they retract so strongly that the skin readily covers them, its vitality is less endangered, and a great cellular plane is not opened. The bulk of the soft parts of the thigh, especially near the pelvis, lies at the inner side of the femur. Why put a knife through these parts? It is better to enucleate the femur where it is most thinly covered, and cut across the limb where it is smaller and further removed from the trunk. In removing the thigh very low down, the area of the wound is no doubt increased, but even then it would be a much less dangerous wound in character and locality. The operation was of course more suitable for those cases in which the soft parts could be freely left than for malignant and other exceptional cases. The surgeon may, if he choose, make the circular sweep, before the shaft of the bone is turned out, if precaution against hæmorrhage have been very complete. There ought to be no hurry; the patient is in a deep sleep, no large vessels are near, and the femur may be patiently turned out of a bed that need neither be scored nor stabbed. If the thigh were to remain a soft, pendulous mass, it would be a small price to pay for greater safety, but it is a remarkable circumstance that the muscles do not rest until the longest thigh has become a short one. In hip-disease, with much acetabular mischief, the wound gives safe access and free drainage for any length of time. The principle of the operation might be adopted in amputation below the trochanters (a chain-saw being used), and indeed in amputations in other localities. The cut surfaces being moistened with terebene, the large sponges were kept constantly moist with the same antiseptic liquid. These kept up deep adjustment, gentle elastic pressure, cleanliness, antisepticity, and rest. When the sponges were removed the stump was as clean as a newly washed face. It seems a paradox, perhaps, but the moist, antiseptic sponge is constantly washing and cleaning at the same time that it is constantly maintaining perfect rest and immobility.—*London Lancet.*

A case is reported in the *Journal of the Sociedade das Scientias Medicas*, at Lisbon, of a successful distal ligature of the common carotid for aneurism of that artery.

FRACTURE OF THE FOREARM IN CHILDREN.

DR. DE SAINT GERMAIN.

Translated for the Canadian Journal of Medical Science.

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We come now to the most frequent form of fracture in early life: fracture of the forearm. It presents in the child the following peculiarities:—1st. Both bones are almost always broken, and fracture of the radius alone may be considered as absolutely exceptional until we approach the age of fifteen years. 2nd. Fractures by penetration are much rarer than in the adult. 3rd. Incomplete fractures are rather frequent, and for proof of this I only need that characteristic crepitus which is perceived when a fracture of the forearm in a child is reduced, and when you thus render complete the "green-stick" fracture of the English. From these observations it may be deduced that the typical characteristic signs of the classic fracture of the radius (the back of the fork, the equalization of the styloid apophyses, the Z line of the radial border of the forearm) are almost constantly wanting here. On the other hand, the most convincing sign is that which you have always seen me invoke. It consists in a manœuvre analogous to that we have described for the recognition of fracture of the radius at its upper part, and consisting in the exaggeration of the curve which the fracture has impressed upon both bones of the forearm which are most frequently broken on the same level. This method of proceeding leaves no doubt, and it is unnecessary to insist upon seeking for crepitus which is almost never found. The fracture which now engages our attention is rarely complicated with sufficient swelling to prevent the immediate application of retaining apparatus. This is how I invariably proceed:—The patient having been chloroformed, although this is scarcely necessary here, an assistant draws the arm from the body and holds it solidly by the elbow. Putting the forearm in pronation, I seize with the left hand the middle part of the forearm; my right hand embraces the wrist in such a way that my two thumbs are placed on a line with the fracture, and are ready to interfere if the coaptation proving rebellious to traction require a direct pressure. A vigorous and progressive traction is then practised, as if I were going to pull the arm in two; and soon a rectification of the axis of the forearm, the disappearance of the tumour on its anterior face, and sometimes the characteristic crepitation mentioned above, inform me that the reduction is accomplished. I then apply two graduated compresses upon the anterior face of the forearm from the bend of the elbow to the ends of the fingers. A wooden splint the same length as the compresses is placed over them. Two other graduated compresses, likewise supported by a splint, are also placed on the back of the forearm, and extend far enough downwards to cover about half the dorsal surface of the hand. It is imprudent to, as is often done, allow the compresses and splints to end opposite the radio-carpal articulation. The continuous pressure exercised upon this region very often in the child produces sloughs which are very obstinate to cure. The apparatus then formed, is fixed by means of long strips of diachylon plaster, three in number, the first for the middle, the second for the upper end, and the last for the wrist. It is indispensable not to draw these bands too tight. Their simple application is sufficient. You thus have an apparatus open to inspection, which enables you to watch the condition of the integuments, the coloration and any phlyctenulae which may occur, and to interfere as soon as may be deemed necessary. A roller bandage designed to keep the adhesive strips in place, and obviate soiling of the apparatus, is afterwards applied and covered with a thin layer of paste. The apparatus must be removed every four days at least, and if any irregularity in the consolidation be perceived it must be rectified at once. Nothing is more frequent in fact, than fractures of the forearm viciously consolidated. * * * * When the apparatus we have above described, is removed at the end of twenty days, it is necessary to practise movements of pronation and supination, for the superior and inferior radial articulations having been subjected to a prolonged immobility have become stiff, and it is on their account that forced movements become necessary. A sling only will be required for two or three days after removal of the splints.—*La France Médicale.*

EXCISION OF THE INITIAL LESION OF SYPHILIS.

Dr. Otis writes that in nine cases in his practice early excision modified the intensity of the general infection. Auspitz records twenty-three cases, in fourteen of which there were no subsequent manifestations. Kölliker records eight cases in thirty of which there were no secondary symptoms, and in the remaining five the secondary symptoms were mild. Dr. Otis lays down the following rules for this operation: First cleanse the parts thoroughly by gentle bathing in warm water; in all open lesions apply a solution of carbolic acid of a strength of one part to forty of water, after which raise the mass of induration between the forefinger and thumb, and encircle it firmly at the base with a bit of fine silver, or malleable iron wire. The indurated part may be separated from the normal tissue in the same way by compression between the arms of a bent probe, being careful to include the entire induration. Now, with a narrow sharp-pointed bistoury, pierce the tissues at the centre beneath the compression wire or probe, and cut well under and out, including all the indurated and a little of the sound tissue of that side. This effected, from the place of beginning, cut out in the same way on the opposite side. Be assured, by careful examination, that every portion of the neoplasm is removed; then introduce uninterrupted sutures of silk or silver wire at intervals of ¼ of an inch. The patient should be kept in the recumbent posture, the parts constantly wet with carbolated water, until the third day, when, on removal of the sutures, union by first intention will, as a rule, have taken place. The resulting cicatrix may indurate to a greater or less degree, but rarely, if ever, to the extent of inducing a solution of continuity. In no case does this procedure lessen the necessity for constitutional treatment.

COLOUR-BLINDNESS.—M. Jouval recommends interposing between two glasses a thin layer of gelatine tinted with fuchsine. By regarding objects through such a medium, all the difficulties of colour-blindness are said to be corrected.

Midwifery.

THE TREATMENT OF HÆMORRHAGE IN ABORTION.

BY W. T. LUSK, M.D.,
Professor of Obstetrics, and Diseases of Women and Children in the Bellevue Hospital Medical College.

As it is practically desirable to make some distinction between interruptions of pregnancy taking place in the earlier and later months previous to the time when the child becomes viable, I shall use the term abortion to designate the discharge of the ovum in the first three months, and apply the expression "immature delivery" to the completion of labour from the fourth to seventh month inclusive.

THE TREATMENT OF INEVITABLE ABORTION.

In the first two months little treatment besides rest in bed for a few days is ordinarily required. In the exceptional cases the treatment does not differ from that in the hæmorrhages of the non pregnant uterus.* In the third month we distinguish:

I. Cases in which the ovum is thrown off entire.

II. Cases in which the sac ruptures, and the embryo escapes with the discharged fluid.

1st. When in the third month the ovum is thrown off without rupture of the fœtal membranes, the hæmorrhage rarely assumes dangerous proportions. The uterine contractions press the ovum into the cervix, which dilates and, in primiparæ, becomes somewhat elongated. As the ovum descends, the body of the partially emptied uterus retracts. The effused blood coagulates in thin layers between the ovum and the uterine walls. The ovum forms a tampon which fills the cervix and restrains the hæmorrhage.

No active treatment is therefore demanded. A vaginal douche, consisting of a pint of tepid water, may be used twice a day as a measure of cleanliness. All attempts to disengage the ovum with the finger should be avoided, as endangering its integrity. The vaginal tampon is unnecessary. It should only be used as a

*In the discussion following the reading of this paper Dr. Barker drew my attention to the occasional severity of hæmorrhages in the first two months of pregnancy.

safeguard, where patients live at a distance from medical assistance, and can only be visited at long intervals. As it is never certain that the rupture of the ovum may not take place during the course of its expulsion the tampon may in such cases be employed in anticipation of a possible increase of hæmorrhage from sudden collapse of the membranes. In multiparæ the ovum seldom remains long in the cervix. In primiparæ, on the other hand, the tardy dilatation of the os externum may lead to a retention of the ovum in the cervix lasting for days. As this condition is extremely painful, it is allowable to dilate the os externum with the index finger, or even by incisions through the ring of circular fibres which furnish the cause of delay.

Small portions of the decidua vera sometimes remain after abortion, attached to the uterine walls. They commonly do no harm, but are discharged later with the lochial secretion.

2. When the sac ruptures, and the *liquor amnii* escapes, the removal of the pressure exerted upon the uterine wall by the intact ovum is followed by profuse hæmorrhage from the utero-placental vessels.

The diagnosis of rupture may be made either from finding the embryo in the clots, or in the case of a dilated cervical canal by the direct examination of the uterine cavity. Although after rupture portions of the ovum may still be felt, we miss the smooth surface of the fluctuating amniotic sac. When the embryo cannot be found, and the cervix is closed, profuse hæmorrhage alone would render the occurrence of rupture extremely probable.

The principles of treatment in these cases are very simple. The indications are to check the hæmorrhage, and to empty the uterus. As to the best methods of attaining these results opinions widely differ.

When cases are treated with rest in bed, the internal administration of ergot, and cold cloths applied to the abdomen and vulva, the loss of blood is usually considerable, but the most of them terminate favourably. In some, however, the hæmorrhage may prove so severe as even to threaten life. Now, it is in every way desirable, for the future welfare of the patients, to restrain the hæmorrhage within the narrowest limits. The most effectual means of arresting the hæmorrhage, is to clean out the uterus. If, therefore, the physician finds at the time of his visit the cervix sufficiently dilated to allow him to introduce his finger into the uterus, he should not hesitate at once to remove the retained portions of ovum. The operation does not require any considerable amount of technical skill, while the immediate results are in the highest degree satisfactory. The patient should be placed cross-wise in bed, with the hips drawn well over the edge. The legs should be flexed, and the thighs held, where assistants can be obtained, at right angles to the body, to secure the greatest degree of relaxation to the perineum and abdominal walls. The right index finger should be then passed into the vagina and through the cervical canal, while the left hand placed upon the abdomen gradually presses the uterus down into the pelvic cavity, so as to bring it within reach of the examining finger.* This portion of the act should be performed slowly, while every effort is made to divert the attention of the patient. Hasty manipulations invariably excite, in the most willing of patients, the full resistance of the abdominal walls. When the point of the finger reaches the os internum it is sometimes necessary to pause for a minute or two, to await a sufficient degree of dilation to allow the finger to pass beyond the insertion of the nail. When the right finger is used, it should be made to pass upward with its dorsal surface along the left side of the uterus to the opening of the Fallopian tube, thence across the fundus to the right side. As the tip of the finger passes down upon the right side it presses the detached ovum before it toward the os internum. By the time the finger has thus made the circuit of the uterus, the ovum is pressed into the cervical canal, and thence passes easily into the vagina. With the left finger the movement is exactly the reverse. The finger passes first with its dorsal

* Prof. A. R. Simpson (Trans. Edin. Obst. Soc., Vol. IV., page 227) recommends drawing down the uterus by means of volsellum forceps attached to the anterior lip of the cervix. I have once seen extreme hæmorrhage follow this manœuvre (seventh month of pregnancy), and now feel some hesitation about its employment, at least in the later months.

surface directed to the right side, from the right Fallopian tube across the fundus, and downward along the left side of the uterus. The only resistance the finger meets is at the placental insertion, where a certain amount of manipulation is required to complete the detachment.

When the uterus cannot be pressed down within reach of the index finger by force exerted above the symphysis pubis, it is permissible to introduce the hand into the vagina; but, in such a case the fingers are apt to become cramped, and all freedom of manipulation to be destroyed. A better means of overcoming the difficulty consists in the administration of an anæsthetic. In cases of extreme anæmia, chloroform should be discarded as too dangerous. Ether, however, has often seemed to me, on the contrary, to possess a stimulating action, and its use to be followed by increase in the volume and force of the pulse. The relaxation produced by the anæsthetic makes it easy to depress the uterus down to the pelvic floor, where it can be reached with comparative ease.

After the removal of the ovum, the cavity of the uterus should be washed out with a stream of tepid carbolized water, in order to bring away any small detached portions of the ovum.

In the manual extraction of the ovum, deliberation and perseverance are the main elements of success.

If, when the patient is first seen by the physician, the cervix is not sufficiently dilated to allow the finger to pass without force, the vaginal tampon should be employed.

The tampon restrains the hæmorrhage, stimulates the uterus to contraction, and allows time for the employment of measures to rally a patient exhausted by profuse losses of blood. The material of which a tampon is made is a matter of indifference, provided only it fills the vagina to its utmost capacity. In cases of urgent need, a soft towel, handkerchiefs, strips of cotton cloths, dampened cotton, wool and the like, may be seized upon to meet a temporary emergency. The time-honoured sponge, on account of its porosity, is least deserving of favour. When, however, the physician proposes to leave his patient for a number of hours, the mere hasty filling of the vagina through the vulva will not suffice. On the contrary, the highest degree of safety can only be secured by the closest observance of the rules of art.

The first essential of a good tampon is, that it be carefully packed around the cervix uteri, and fill out the more dilatable upper portion of the vagina. This can be accomplished only by the aid of a speculum. The method I usually employ is one, the credit of which, so far as the general features are concerned, I believe belongs to Dr. Marion Sims. It consists in soaking cotton-wool in carbolized water, and then, after pressing out any excess of fluid, in forming from the carbolized cotton a number of flattened disks about the size of the trade dollar. The patient is then placed in the latero-prone position, and the perineum retracted by a Sims' speculum. The dampened cotton disks are introduced by dressing-forceps and under the guidance of the eye are packed first around the vaginal portion, then over the os, and thence the vagina is filled in from above downward, until the narrow portion above the vestibule is reached. No other plan of tampon with which I am acquainted can compare in solidity and effectiveness with this. Its removal is accomplished by the detachment with two fingers of a portion at a time. This part of the procedure is moderately painful. Many methods have been suggested to overcome, in the removal, the necessity of introducing the fingers into the vagina. A very ingenious one consists in attaching the cotton to a piece of twine, so as to form a kite-tail, which can be withdrawn by simply making tractions upon the extremity of the string left hanging outside the vulva. Prof. I. E. Taylor uses a roller bandage. It is efficient, and, like the kite-tail described, can be easily removed.

Before the introduction of the tampon the vagina should be thoroughly washed out. No tampon should be allowed to remain in the vagina much over twelve hours. Immediately after withdrawing the tampon, before proceeding to the examination of the uterus, the vagina should be cleansed by an injection of tepid carbolized water (gr. xxx. ad. Oj.). Often, after the removal of the tampon, the ovum

is found in the upper portion of the vagina, or filling up the cervix. If this is not the case, and the cervix is not dilated, so that manual extraction may easily be performed, the tampon should be re-introduced.

It is customary from the outset to sustain the action of the tampon by the administration of ergot, either in the form of the fluid extract (thirty drops every three to four hours), or of a solution of ergotine given hypodermically. (Ergotine, gr. xij., glycerine, ʒi., ten minims twice in the twenty-four hours.) In women with abundant adipose tissue, the injection should be made into the subcutaneous tissues of the lower abdomen. In others, the outer surface of the thigh should be selected.

If the patient is collapsed from loss of blood, after tamponing, opiates, tea, and alcoholic stimulants should be administered; the latter in small, but frequently repeated quantities, until the cerebral anæmia is relieved, and the capillary circulation restored.

If after its removal the cervix is found not to be dilated, the tampon may be reintroduced and left *in situ* for another period of twelve hours. The employment of the tampon is not, however, to be recommended for a period much exceeding twenty-four hours. Its continued use is apt to irritate the vagina. In spite of carbolic acid it acquires an offensive odour. It generates septic matters which, in the long run, creep upward through the cervix into the uterine cavity, and produce decomposition of the ovum. I prefer, therefore, in cases of undilated cervix, after twenty-four hours of vaginal tamponing, to resort to sponge-tents. The tent should be long enough to pass well up through the os internum. After six to twelve hours the tent should be removed, and, after a preliminary vaginal douche, manual extraction be proceeded with in accordance with the rules already given.

In manual delivery it is desirable to remove the decidua as well as the ovum. When the cervix is patent this is easy, as the decidua is then detached from the uterine walls. When the cervix is unchanged the detachment is usually incomplete. In such cases it is advisable, therefore, to try first the tampon before the sponge-tent, as the former stimulates the uterus to contract, and promotes the separation of the decidua, even when it fails to secure the discharge of the ovum.

Inside the uterine cavity ovum-forceps should be used with great caution. I have discarded them altogether. In the first place they are dangerous. In the second place they are unnecessary. When, however, the retained portions of ovum have left for the most part the uterine cavity, and occupy the cervical canal, the delivery may at times be advantageously hastened by placing the patient upon her side, and, with the cervix well brought into view by a Sims' speculum, applying the ovum-forceps, under the guidance of the eye, within the cervix to the sides of the placenta (Skene). But great care requires to be exercised not to break away the fragile structures, and leave material portions behind.

Under like circumstances Hoening recommended a modification of Crede's method for expression of the placenta. With the patient lying upon the back, the operator, according to Hoening, should seek to compress the body of the uterus between the left hand, laid above the symphysis pubis, and two fingers of the right hand, introduced into the vagina. The measure is only practicable when the ovum has, to a great extent, passed from the uterine cavity. As it is somewhat painful, and requires, for success, lax abdominal parietes, it possesses a limited range of applicability.

Treatment of Neglected Abortion.—When, following abortion, the uterus has once been completely evacuated, hæmorrhage ceases. A slight lochial discharge persists for a few days during the period in which the uterine portion of the decidua vera completes its period of repair. If, therefore, a patient comes to us two to three weeks after the supposed conclusion of an abortion, with the story of recurrent hæmorrhages taking place as a rule whenever she leaves her bed and assumes the upright position, it may be assumed, with an approach to certainty, that portions of the ovum still remain within the uterus. Oftentimes a fetid discharge points to the fact that decomposition has been set up. The absorption of septic materials may furthermore become the source of chills, of fever, and of great uterine tender-

ness. In most cases, with rest in bed, the contents are discharged by suppuration, and recovery ultimately takes place, but only after a slow, protracted convalescence, during which pelvic cellulitis and pelvic peritonitis occur as not uncommon complications. Hæmorrhage, peritonitis, and septicæmia may, however, bring the case to a fatal issue. The removal of the retained placenta and membranes is therefore indicated not only as a measure calculated to promote recovery, but to avert possible danger to life.

With regard to the operation for removal, the rules already given are applicable. The following peculiarities should, however, be borne in mind. In case the retained portions are undecomposed the cervix is usually found closed, and requires preliminary dilatation with the sponge-tent. When decomposition has once set in, the os internum will, as a rule, allow the finger to pass into the uterus.* When a decomposed ovum is removed by the finger, a chill and a septic fever, which rapidly exhausts itself, however, is apt to follow in the course of a few hours. This chill and fever result from the slight traumatic injuries inflicted by the finger upon the uterine walls, whereby the capillaries and lymphatics become opened up to the action of the septic poisons. The fever ends in a short time because the reservoir of supply is removed with the *debris* of the ovum. If the uterine cavity, after the operation, is carefully washed out with carbolized water, the septic fever is often averted. The beneficial results following the complete emptying of the uterus in these cases are so decided, that of late years I have not allowed myself to be deterred from proceeding actively, even when perimetritis and parametritis in not too acute a form already existed. In practice, multitudes of examples show that the products of inflammation situated in the pelvis, do not absorb so long as putrid materials are generated in the uterine cavity.

The removal of a fibrinous polypus, owing to its smoothness and the small size of the pedicle, is often a Sisyphus task. The separation can only be successfully accomplished when the palmar surface of the index finger presses from above upon the point of attachment. This necessitates a choice of hands. Thus, when the polypus is situated to the left, the right index finger should be employed; and the left index finger when the polypus is situated to the right. After the detachment is complete it is necessary to press the polypoid body firmly against the uterine walls and proceed with its withdrawal slowly. If, as sometimes happens, the polypus slips from under the finger, it is necessary to pass the finger again to the fundus of the uterus, and repeat the attempt. Small portions, not larger than a pea, can be washed out by the uterine douche. When the polypus is attached near the os internum, the latter will be found patulous, but, when it is well up in the body of the uterus, dilatation with sponge-tents is a frequent prerequisite to removal.

A good deal of testimony has been offered of late, by Skene, Spiegelberg, Mundé, Boeters, and others, in favour of the use of the curette for the removal of retained portions of ovum. To whom, exactly, the honour of this method belongs it is difficult to say. Accidentally, I read in a record book of Bellevue Hospital, a few days ago, an account of the operation performed by Dr. Fordyce Barker in 1870. With the curette the dangers from dilating the os and manipulating the uterine cavity are avoided. For myself, however, I confess I never feel quite safe until my index finger has made the complete tour of the uterine cavity. Still, the method has its advantages in cases where the removal of bodies retained within the uterus is complicated by the existence of extensive peri- and parametritis.

The Treatment of Immature Deliveries (fourth to seventh month).—Distinctive of immature deliveries are: painful periodic uterine contractions, which can be recognized by the hand applied above the symphysis pubis; rupture of the membranes, and discharge of the fœtus; the complete formation of the placenta and umbilical cord; while in abortion the uterine contractions are obscure, the placenta rudimentary, and the ovum is frequently expelled

* Huter: *Compendium der Geb. Operationen.* Leipzic, 1874, S. 32. To this excellent work I acknowledge my indebtedness for many hints and suggestions of extreme practical value.

entire. In the treatment of immature delivery the tampon may usually be discarded. After rupture of the membranes and expulsion of the fœtus, the hæmorrhage should be controlled by grasping the fundus of the uterus in the hand through the abdomen and compressing the uterine walls firmly together.

The passage of the fœtus opens the uterus so as to allow, in the fourth and fifth month, the introduction of two fingers; in the sixth and seventh month, that of the half-hand. In case compression of the uterus does not arrest the hæmorrhage and expel the placenta, the cord should be carefully followed to its insertion, to determine the side upon which the implantation exists. If the placenta is implanted upon the right side, two or four fingers of the right hand, according to the degree of cervical dilatation, should be passed up along the left side of the uterus, across the fundus to the placental site. The detachment should be effected with the tips of the fingers, and the placenta pressed downward as the fingers descend along the right side of the uterus. The left hand should be employed, in the reverse direction, when the placenta is situated to the right.

In conclusion, the following summary of the views which have been expressed is respectfully offered :

1. In the first two months an abortion needs no special treatment. The hæmorrhages of early date are amenable to the same principles of treatment as those from the non-pregnant uterus.

2. In the third month no treatment is required when the ovum is expelled with intact membranes.

When the membranes rupture previous to expulsion, and hæmorrhage takes place, immediate removal should be attempted, provided the cervix be sufficiently dilated to admit the index-finger. When the cervix is closed, the tampon should be tried for twenty-four hours. If the tampon proves ineffective, the cervix should then be dilated with a sponge-tent, and the ovum removed with the finger. The finger should pass up along the side of the uterus, across the fundus, and complete the circuit of the uterine cavity.

3. In cases of neglected abortion, retained portions should be removed by the finger or the curette. When the ovum is decomposed, no dilatation of the os is usually necessary. When the ovum is fresh, the preliminary use of sponge-tents is usually demanded if manual delivery is resorted to.

4. Fibrinous polypi, when situated near the os internum—a rare occurrence, indeed—arrest the involution of the lower portion of the uterus. The os is therefore open, as a rule, and permits the passage of the finger. When the polypus is attached to the fundus, the cervix is usually closed. Small, smooth, slippery bodies, like fibrinous polypi, are rarely to be detached, unless the finger operates from above, so that the choice of hands depends on the side to which the polypus is attached.

5. In immature deliveries hæmorrhage can usually be controlled without the tampon, by compression of the uterus, and, in cases of delay, by the manual extraction of the placenta.—*New York Record.*

MECHANICAL SUPPORT OF THE UTERUS.

DR. THOMAS ADDIS EMMET.

* * * * * * *

"We will now consider briefly the mechanical means to be resorted to for the relief of displacements. I am ignorant of any instrumental means, safe or reliable, for correcting the position of an anteverted uterus. Great relief may sometimes be obtained, on increasing the degree of anteversion, by the use of a pessary with a long enough curve in the posterior *cul-de-sac* to lift the neck of the organ from the floor of the pelvis. On thus slinging the organ, as it were, with the fundus resting against the pubis and the cervix elevated, the circulation will be improved, and the irritability of the bladder lessened. We gain time by this means, and enable the patient to take more exercise, since we break the force or jar which would be otherwise transmitted to the organ so long as the cervix rested on the floor of the pelvis. The various devices for forcing the uterus into an upright position to a point which the organ likely never occupied even when in a healthy state, are faulty in theory

and wrong in practice. If we can lift, by any appliance, the uterus to a point where the obstructed venous circulation can be relieved through the neighbouring tissues, which have been put on the stretch by the sagging organ, it is all that can be accomplished by such means, and the mere anteversion is of no consequence. Any instrument making direct pressure on the anterior wall, the chief seat of disease and the point of greatest tenderness, must prove a source of irritation. I deprecate even more the intra uterine stem-pessary, for, had this instrument been the device of the Evil One himself, its use could not be productive of more danger. Its use in a flexure seems as rational as would be the introduction of a straight steel sound into the urethra for the relief of an existing chordee; the penis might be straightened by force, but the cause of difficulty would certainly not be removed. The treatment of retroversion of the uterus is more satisfactory, mechanical means can be better applied, and the good resultiug from relieving the obstructed circulation is well marked on restoring the organ to its natural position. A recent case of retroversion can be reduced with comparative ease, and an instrument can readily be adjusted which will keep the organ so far anteverted as to render it difficult for it to return to its former position. If, however, the displacement has been of long duration and the uterus has become flexed, the condition will, in all probability, have acted as a source of irritation in causing cellulitis to a greater or lesser extent. Even should adhesions not have formed, a degree of congestion will have been kept up so as to require but a slight provocation to establish a fresh attack of inflammation. It is, therefore, wise to proceed with the greatest caution in any attempt at reduction until we have fully appreciated the condition. Should we find the uterus firmly bound down by adhesions, it can be replaced in time, for with care, patience, and good judgment, in not attempting too much in a single effort, these bands will gradually become so stretched and attenuated as to offer no longer any resistance. The utero-sacral ligaments, in a state of health, are scarcely worthy of note, being formed but of a reduplication of the peritoneum and a little cellular tissue. These, however, become frequently thickened, and having closed partially over an enlarged and retroverted uterus, can be readily mistaken for adhesions, in consequence of the obstacle they sometimes present in an attempt to restore this organ to its normal position. I have long accustomed myself to rely on the index-finger for the reduction of this displacement, and with a little practice it becomes the most reliable means we can employ. It is one certainly attended with the least risk, as we are able to appreciate at once the point and extent of resistance. When we have once ascertained the fact that there are no adhesions nor lurking inflammation in the neighbouring cellular tissue, an experienced operator may, with comparative safety, use the sound or any other means to which he has been accustomed. But the method which I will describe is attended with less pain, and I believe with the least danger, under all circumstances. The patient is to be placed on the back, with the knees flexed, and the hips drawn down to the edge of the operating table or chair. Introduce then the index-finger into the vagina, and direct the point of a tenaculum, which is to be hooked into the posterior lip, just within the os. This instrument is to be used for the purpose of gently drawing forward the organ, sufficiently toward the vaginal outlet, that we may be satisfied the fundus is distant enough from the hollow of the sacrum to pass the promontory when elevated. At the first attempt this must be done with care, and if a point is reached at which great pain is caused, we must then desist. By this manœuvre the uterus has, of course, become more retroverted than before. To correct this, the perineum should be pressed firmly back, that the finger in the vagina may be passed as far up behind the uterus as possible, and made at the same time to lift up the organ. When the uterus has been thus elevated, and while it is being held up by the finger, the cervix is suddenly carried in an arc of a circle, downward and backward, by means of the tenaculum held in the other hand. By aid of the finger in the vagina, the fundus has been pressed up against the utero-sacral ligaments. These ligaments, having been put slightly on the stretch, gape

as the tension is suddenly relaxed by carrying the cervix backward, and the fundus slips between them. The finger must be then placed against the anterior lip, the tenaculum withdrawn, and the organ anteverted by passing the finger repeatedly down the anterior face of the uterus, so as to press the cervix downward and backward into the hollow of the sacrum. If an unusual degree of pain is experienced at any point, we must use our judgment as to how far it may be safe to proceed, or desist entirely for the time being, until all active symptoms have subsided under the proper treatment. When successful, I frequently make no attempt, by mechanical means, to hold the uterus in position, until I have again replaced it and satisfied myself that no tenderness on pressure exists at any point which would come in contact with the pessary to be used. The form of the instrument should be adapted to carry the cervix well back, and with a sufficient curve in the posterior *cul-de-sac* to keep it elevated, so that the organ must remain anteverted. I have been consulted, more than on any other point, as to the best form of pessary to be used in practice. A difficult question to answer, as there is some individual peculiarity about nearly every case, on the appreciation of which to a great extent success will depend. Some modification of Hodge's closed lever pessary, however, will be found applicable to the largest number of cases, as it conforms more than any other to the natural shape of the vagina. A pessary, to do no harm, should be small enough to admit of the passage of the finger between it and the vaginal wall at every point, while the patient lies on the back.

It must be just large enough to give the needed support to the uterus, and be at the same time small enough for the vagina to regain gradually its natural size. The elasticity of the canal is sufficient to admit of a dilatation to the extent of the pelvic excavation; but it will prove an exception to the rule if a pessary, properly curved, need ever be over three inches in length and an inch and a-half in width. Whenever it is possible to avoid making the pubis the chief point of support, I do so. But it is often unavoidable in cases of long standing retroversion, where the anterior wall of the vagina has become shortened in consequence, and in cases of prolapse of the posterior wall, from laceration of the perineum. But where the vaginal outlet is not too large, and the posterior *cul-de-sac* is of a natural depth, the principle of the lever-pessary is applicable to nearly all cases. The fulcrum of this double lever rests on the posterior wall of the vagina at the bottom of the *cul-de-sac*. It should be so curved in reference to this *cul-de-sac* and posterior wall at one extremity, and at the other end bent with a lesser curve in the opposite direction, so that the instrument may be balanced. As the patient stands on her feet, the weight of the uterus will cause the other end of the instrument to rest against the anterior wall of the vagina, near the neck of the bladder. On assuming the horizontal position, the instrument will present in the axis of the vagina near the outlet. It will thus compensate itself by a change of position, so that it cannot, from continued pressure at one point, cut into the vaginal tissues. A longer curve will be needed in the *cul-de-sac* where retroversion has existed, than with prolapse from hypertrophy, where the object is simply to lift the organ from the floor of the pelvis. In the latter condition, the upper portion of the vagina will be more dilated, as a rule, than the lower part, and the instrument must be made to correspond. The closing in of the vaginal walls around an instrument, made larger above, has the effect of crowding it upwards in the canal. When even the outlet is larger than natural, and dilated from a prolapse of the vaginal walls, we must restore the canal to a natural size and close the laceration through the perineum, by a surgical operation, before an instrument can be worn with advantage for correcting the retroversion. An instrument, under the circumstances, to be used as a temporary means of relief, must be made wider below, with the greater curve also at this point, so as to get the needed support from behind the pubis, and with a depression to guard the neck of the bladder from pressure. We find occasionally a difference in the curve on each side of the symphysis, so that, if an instrument is made symmetrical, it will bury

and cut into the soft parts covering the lesser curve. On the corners of the instrument there should be no sharp angles, but a gradual curve; frequently it is necessary to bend the corners downward, to correspond with the roof of the vagina at this point. In the posterior *cul-de-sac* the instrument should never be so abruptly curved as to make pressure directly against the uterus at its junction with the vagina, but at some little distance beyond. The circulation in the neck is easily obstructed by pressure at this point, so that it will soon cause an erosion about the os; and frequently an intolerance to the presence of any instrument in the *cul-de-sac* becomes established, in consequence of irritation or inflammation of the lymphatic glands found in this neighbourhood.

The shorter the vagina, the straighter must the instrument be made, for if curved too much it will rotate and remain across the axis of the canal. A straight instrument has to be wider in the middle, in proportion to its length, than a curved one. The widest part of the vagina is from one sulcus to the other, while the lateral walls and posterior surface of the canal form a concavity; consequently, a curved instrument should be made rather smaller in the middle, as its support is chiefly derived from the posterior wall. It is a very common occurrence to find an instrument, when too wide, cutting its way along the lateral walls of the vagina, at the bottom of a deep fold formed as the pessary is carried downward from the pressure above. It may be accepted as a rule that, so long as a patient can recognize by her feelings that she is wearing an instrument, it either does not fit, or she is in no condition to wear one; and in either case it will do her harm. So soon as an instrument has been properly adjusted, and there is no tenderness on pressure at any point in the vagina coming in contact with it, the patient will be unconscious of its presence. I prefer at first the use of block tin rings, on account of their greater malleability. After modelling one of a proper size to the case, and having fairly tested its use, I then have the instrument reproduced in aluminium, silver gilt, or hard rubber. These are, in brief, the main points to be observed in adjusting a pessary properly, but in each case there will be a necessity for some modification in consequence of individual peculiarities. Success will depend entirely on an accurate appreciation of these differences, and on the mechanical skill innate to the operator. To a want of both or of either gift, must be attributed the unsatisfactory results so often complained of.—*St. Louis Medical and Surgical Journal.*

Original Communications.

A CASE OF PEMPHIGUS FOLIACEUS.

BY J. E. GRAHAM, M.D.

In the *Archives of Dermatology*, (Jan. number, 1877,) the history of a case of pemphigus foliaceus is given by Dr. Sherwell, which he claimed to be the first recorded case occurring in this country. I have not seen the notice of any similar case since that time, so that the following might be considered the second in the order of publication. I do not think, however, that the disease occurs so rarely as one might be led to believe from the above statement, but am of opinion that some true cases of pemphigus foliaceus have been diagnosed as pemphigus chronicus or eczema.

John F——, æt. 55, farmer, admitted Sept. 1, 1878. He had always been quite healthy until about five years ago, when he suffered from a sore on the lip which appears to have been an epithelioma. The part was removed by the knife after ineffectual attempts had been made to destroy it with caustics. Since that time he has noticed a peculiar numb feeling in the lip, and there is also some scaliness about the margin of the epithelial surface.

About eighteen months ago an eruption of a squamous character appeared on the upper part of the chest, which spread gradually until the whole of the trunk became affected. About the time of the appearance of this eruption he was told by a quack that the cancer on the lip had not been entirely cured. Caustics were again applied to the part, until it became sore and discharged pus. During this time the only application used on the skin was olive oil. In a short time the sore on the lip healed up, but the eruption on the body spread gradually. About a year ago, while working in the harvest field, the perspiration irritated the skin so that the eruption became much more general, and of a more aggravated form. After the harvest was over it remained as it was before, until last spring, when it again increased in severity, and spread to some extent on the extremities.

Family History.—His mother died of consumption when he was nine years of age; one

cousin also died of consumption. No other members of the family suffered from that disease. His father died at eighty. He never knew any of the family to have disease of the skin. He himself has been subject to occasional attacks of colic, had inflammation of the bowels twice, and when about twenty years of age he had a venereal sore on the penis. No secondary symptoms followed. He has a healthy family. He has always been temperate, and has lived well. His wife has been dead some years. He states that he has not exposed himself to venereal disease since his marriage, some thirty years ago.

Present Condition.—The patient is a medium-sized man in moderately good condition. His appetite is poor; bowels constipated; pulse increased in frequency. The greater part of the trunk is covered over with dirty yellow scabs, which can be easily removed, and which leave a base deeply pigmented, similar to that which follows local congestion. The epidermis can be easily rubbed off on all parts of the body, especially in the neighbourhood of the eruption. The head and face present an appearance similar to that of the chest, except that on the face there are several patches of a raw, bleeding surface. On the arms and legs there exist bullæ from the size of a pea to that of a walnut. The smaller ones are filled with a clear, transparent fluid, and the larger ones are flattened, and partly filled with a white opalescent fluid. On account of the irritability of the parts many of the bullæ have been destroyed, leaving a raw congested surface, very similar to that left after a burn. This surface is very sensitive, the least rubbing causing pain.

Some of the red patches are quite fresh and moist, whereas others are dry, and partly covered by coagulated blood. Those bullæ which have dried up without being rubbed, present large dirty yellow scales, which, in some instances, are turned up at the edges. The eruption is most irritable at night, being aggravated by the warmth of the bed. He always notices a burning pain in the part immediately before the vesicles make their appearance.

Treatment.—Alteratives and tonics were given internally. An external application of calamine, zinc oxide, glycerine and water, was ordered for the sore parts. Ol. lini to be used on the chest, and a bran bath to be given each morning.

Sept. 2nd. The patient feels rather better this morning. He had two or three chills during the morning, but they were not so severe as those of the last few days. A number of the dirty yellow scales have been removed by the nurse and have left a pigmented surface. On the feet there are bullæ from the size of a ten cent piece, to that of a large penny. They are flattened, and are almost identical in appearance with the blisters which follow burns. The bullæ, according to the patient's statement, last three or four days, when they commence to dry up. They sometimes appear on parts previously affected, and sometimes on new places. He states that the bullæ appear in greater numbers after the daily use of the bath. He had been treated by bathing for several months previous to his admission.

To-day I stopped the baths, thinking that they might have an injurious effect on the skin. On the right thigh a number of new bullæ have appeared since yesterday. They are of various sizes. A number of small ones sometimes form separately, and afterwards unite to form a larger bulla.

Sept. 3rd. Examined some of the fluid from several different bullæ to-day. Found in all cases that it was either alkaline or neutral. On adding nitric acid a precipitate was formed. On examining the urine found the "Specific Gravity" to be 1020. There was no albumen; no sugar. It was of a slightly acid reaction. Noticed on the thigh some spots where the exudation had become dried up in the form of scales with turned-up edges.

Sept. 4th. Patient is not so well to-day. He suffered from the perspiration, and shaking in the carriage yesterday. A spot on the thigh, which I noticed yesterday to be moist and raw, is now dried up, and covered by a scab composed of partly dried exudation, and of dried blood.

Examined to-day some of the fluid under the microscope. In that from the fresh vesicles, that is from those of less than twenty-four (24) hours' duration, a number of cells were present; they were about the size of red blood

corpuscles, had a granular appearance, and were of a globular form. In the fluid from the older bullæ the cells were more numerous, and much larger than in that from the fresh vesicles.

Sept. 5th. The patient is to-day altogether better. Some new vesicles and bullæ have appeared on the thigh. Ordered the linseed oil to be more freely used.

Sept. 6th. The patient is slowly improving. There are not so many new bullæ appearing as before. There is one bulla on the right knee, quite large, and raised a quarter of an inch above the knee. It is situated a little to one side of the knee. Its contents are separated into two parts; the lower part is made up of pus, the upper part is clear, and of a slightly yellow colour. Ordered to-day ol morrhuae to be given internally.

Sept. 7th. Noticed to-day on the right leg, anterior and posterior surface, three or four large bullæ the size of fifty cent pieces; these have appeared during the night. On the anterior part of the abdomen immediately above the pubes, some large bullæ have appeared, and have been rubbed off, leaving a very moist surface. He feels more comfortable. His appetite is good. He has some fever, but not more than usual. Pulse 94, temperature 100. There is neither thickening nor infiltration of the derma to be found anywhere.

Examined some of the bullæ to-day with the lens, and found that in some cases the fluid exists between the layers of the epidermis, whereas in other cases the whole epidermis is raised. Examined the contents of the vesicles with the microscope again, and found the same appearance as before.

Sept. 8th. He is a little more feverish to-day. Pulse 108. Appetite not so good.

He had some chills this morning. He says he always has chills and fever before the appearance of new bullæ. Noticed a number of new ones to-day. Was able to examine the fluid of bullæ which had only existed for a few hours. I found the fluid in the very fresh ones to be distinctly acid, and containing very few leucocytes. On examining the base of the bullæ with a lens I found that in the more recent ones there was little or no congestion, whereas in the older ones the base was very much congested. I noticed also that in the more recent ones the epidermis was tense, giving the bullæ a round appearance, whereas in the older ones the surface is flattened. New bullæ are appearing on the thigh and legs, and a few on the feet. None on the hands. The trunk is now almost entirely covered with yellow scabs and scales. To-day I made a great number of trials, and found in every case that the more recent the bulla the more acid were its contents.

Sept. 9th. He feels more uncomfortable, around the abdomen and back. His penis is somewhat swollen. On the trunk there is very little healthy skin remaining. Pulse 105, temperature 101⅘.

The bullæ come out in groups periodically. There are scarcely any new ones to-day. Ordered to-day quinine, iron, and arsenic.

Sept. 11th. Patient is still troubled with chills and fever. Pulse 104. Notice that the sores on the face are now covered by thick yellow scabs. Here no application has been made. The yellow scabs on the chest are giving place to large dry scales with upturned edges. These scales are coming off in large quantities. There are now very few new bullæ on the legs. Both knees are now covered with large scales. Added liq-hydrarg-perchlor to the tonic mixture.

Sept. 16th. I have not seen the patient for a few days, owing to absence from town. He is not so well as when I last saw him. Pulse 80, temperature 101, appetite poor; he does not sleep well, owing to a burning sensation which exists in his back. His face is almost completely covered with thick yellow crusts. The skin of the forehead presents a number of deep fissures. The conjunctivæ are inflamed, and a slight purulent discharge appears at the inner corner of both eyes. On the front of the chest scales are coming off in large quantities. The surface of the skin beneath the scales is dry, and presents a more healthy appearance than before. Scabbing is now going on over the parts where the bullæ were in the greatest profusion when he came in. On the legs there are large patches of raw bleeding surface, the result of the peeling off of the epidermis.

Sept. 23rd. Pulse 112, temperature 100. The patient is very restless at night. Complains of chills. The exfoliation from the chest and abdomen is very great. In some places there are deep fissures beneath the scales.

Sept. 25th. He feels more comfortable than when I last saw him. Scales large and flaky. There are still a few bullæ on the legs and feet; none on the trunk. His appetite is better. Condition in every way improved. He is now taking a simple tonic.

Sept. 27th. Patient continues to improve. The amount of exfoliation is not so great. His face is improving. Pulse 97, temperature 100.

Sept. 29th. Very few scales on the chest and abdomen, but they still exist in large quantities on the thighs.

Oct. 3rd. Patient is better. He is sitting up. Suffers still from irritation in some places; ordered ointment of Bismuth, and cerat galeni.

Oct. 25th. The patient is very much improved. In many places the skin is quite healthy; there are still scabs and scales in places.

Nov. 15th. He continued to improve until a few days ago, when the bullæ again appeared on the chest and abdomen, preceded by chills and fever. I determined to give the linseed oil treatment of Dr. Sherwell a fair trial. Ordered it to be freely applied externally, and gave it inwardly.

Dec. 15th. The linseed oil treatment has been carried out faithfully for the past month. The surface of the body has been kept saturated in the oil. I do not see that it has produced any beneficial effect.

Dec. 20th. Patient is now recovering from the second attack from which he has suffered since his admission.

Jan. 18th, 1879. Patient is in much the same condition as when the last entry was made. The pulse, during the past week, has ranged between 80 and 90, and the temperature not above 99°. He is taking a tonic of phosphate of iron, quinine, and strychnine. A lotion of tannin, glycerine, spts. vini rect., and water, being applied externally.

May 3rd. The patient is still in the hospital. He is becoming very much emaciated. Has violent attacks of delirium, so that he has to have an attendant always beside him. During the latter part of the winter, and the early part of spring he has had two or three relapses similar to that mentioned before. The recovery each time becomes less apparent, and is of less duration. He suffers very much from involuntary muscular movements. The twitching is sometimes so great that he can scarcely keep his bed. Two or three times during the winter he has suffered from small sores in the throat and mouth.

The principal features of the disease, as it affected the patient, may be summed up as follows:—

(1) Appearance of bullæ, with flattened surfaces, commencing on the chest and spreading to other parts of the body.

(2) Drying up of the exudation and the formation of larger scales with upturned edges.

(3) The appearance of each successive crop of bullæ was preceded by chills and fever.

(4) Nervous symptoms such as twitching of muscles, delirium, restlessness in sleep, were especially prominent.

(5) Progressive emaciation.

(6) Absolute uselessness of all remedies in producing any permanently beneficial result.

On reading over the history of this case one cannot but be impressed by its typical character. Almost every symptom of the disease, as described in Hebra's treatise on skin diseases, was present in this man's case, and from present appearance the very unfavourable prognosis given will also be verified. The nervous symptoms which were so marked in this case are not mentioned by Hebra.

In attending the case, and watching it throughout its course, I was often struck with the similarity it bore in some of the stages to some forms of eczema. There was, however, no infiltration of the true skin, except that the feet and legs were œdematous when the bullæ were most abundant on these parts.

Since writing the above the patient died. A report of the post-mortem examination will appear next month.

Dr. Isaac Hays died on April 13th, aged 83. He was the editor of the *American Journal of Medical Science* for many years.

Translations.

Sulphate of Iron in Chronic Eczema.

Dr. Mariani, in the *Revista Medica de Chili*, summarises an article by Prof. Percy in which he highly extols the employment of sulphate of iron dissolved in distilled water in the proportion of 30 grammes (450 grains) to 300 of the solvent, in chronic affections of the skin, and especially in eczema. On applying to the affected portions of the skin compresses wet with this solution the results are rapid and astonishing, and eczematous eruptions, which had long resisted various methods of treatment, promptly disappear. In cases in which the smarting and itching are excessive, the tincture or extract of belladonna may be added to this solution. In ten cases Dr. Percy obtained ten cures.—*Gazzetta Medica Italiana.*

Retention Cured by Metallotherapy.

In the same number of the same journal we observe the report of a case of retention successfully treated by metallotherapy. In this case, which occurred to M. Dupuis, catheterism had been resorted to daily for five months, and all kinds of antispasmodic remedies had been exhausted in the treatment of the hysterism which was the cause of the trouble. The application of gold upon the skin provoked convulsions and spasms of the limbs. Other metals, as steel, copper, and platinum caused them to disappear at once; accordingly, some of Burq's plates were applied over the bladder and the neighbouring muscles. An hour later the urine was voided abundantly and painlessly. After this there was no necessity for the catheter, the armatures always sufficing to provoke micturition.

Treatment of Oculopalpebral Phlegmasiæ by Ergotine.

Dr. Planet says its topical application is attended by no pain. His formula is:—Glycerine 20 grammes (ʒv), ergotine 1 gramme to 1½, 8 to 10 drops to be used every two hours. In cases of extensive inflammation it is well to place a compress wet with this solution on the eye for some hours. The graver cases get well in two or three days. The superficial position of the vessels explains this result.—*Revista de Medicina yCirugia Prácticas, Madrid.*

THE CANADIAN
Journal of Medical Science,
A Monthly Journal of British and Foreign Medical Science, Criticism, and News.

To Correspondents.—*We shall be glad to receive from our friends everywhere, current medical news of general interest. Secretaries of County or Territorial medical associations will oblige by sending reports of the proceedings of their Associations to the corresponding editor.*

TORONTO, JUNE, 1879.

LACTOPEPTINE.

This valuable preparation now so well and favourably known to the profession, contains pepsin, pancreatine, diastase or vegetable ptyalin, lactic and hydrochloric acids, in combination with sugar of milk, the active constituents of the digestive secretions of the salivary glands, stomach and pancreas, and consequently would naturally be indicated in any diseases or disorders, either due to or complicated by a deficiency or morbid character of these juices. Experiments go to show that it will convert albumen into albuminoid, starchy food into glucose, and emulsionize fatty food, and that it possesses much greater digestive power than pepsine alone. The New York Pharmacal Association deserve the thanks of the profession and the public for bringing into notice this preparation, to the great value of which many eminent physicians bear testimony. We have used it with gratifying success in dyspepsia, both in infants and adults, in gastralgia due to disordered digestion, in vomiting of pregnancy, and in infantile vomiting and diarrhœas due to indigestion. Very many American physicians speak in terms of the highest praise of its beneficial effects in cholera infantum. It is equally indicated in digestive disorder, functional (so-called), and in that due to, or complicating, organic disease and malassimilation, and can be advantageously given along with other remedies that may be indicated. By its power as an artificial digester it gives the stomach rest, and supplies it, through the blood, with assimilable materials to repair its weakened secreting powers.

Book Notices.

Transactions of the Detroit Medical and Library Association, April, 1879.

Rhymes of Science: wise and otherwise. With illustrations. New York: Industrial Publication Company, 1879.

Hints in Obstetric Procedure. By W. B. Atkinson, M.A., M.D. Philadelphia: D. G. Brinton, 1879.

Chloral Inebriety. Read before the King's Co. Medical Society. By J. B. Mattison, M.D., Brooklyn, N.Y.

Circulars of Information of the Bureau of Education. No. I., 1879. *Training School for Nurses.* Washington: Government Printing Office.

Photographic Illustrations of Skin Diseases. By George Henry Fox, A.M., M.D. New York. Part I.

From our personal acquaintance with the author we expected that his proposed publication would be one of great merit, but we were not prepared to see a work so excellent in every particular as the one before us. The photographs are true to nature, and, in our opinion, give a better idea of the minute appearance of the diseased skin, than any plates we have yet seen. The text accompanying the photographs is plain and practical, and will give the practitioner a good idea of the treatment of the several affections taken up. It is certainly very creditable to the American School of Dermatology, that two such excellent series of plates as those of Drs. Duhring and Fox are being published on this continent.

Queen's University, Kingston—*Graduates in Medicine*, 1879.—*Doctors of Medicine*—Order of Merit—William H. Henderson, Kingston; J. C. C. Cleaver, Trinidad, W.I.; P. C. Donovan, Campbellford; W. A. Lafferty, Perth; R. A. Leonard, Westbrook; R. N. Horton, New Dublin; Geo. Judson, Frankville; Wm. F. Cleaver, Trinidad, W.I.; Geo. Newlands, jr., Kingston; Thomas R. Hassie, Perth; R. K. Kilborn, Frankville; R. H. Abbott, Wolfe Island; James A. McCammon, Gananoque; W. Clark.

Meetings of Medical Societies.

COLLEGE OF PHYSICIANS AND SURGEONS.

ANNUAL MEETING OF THE COUNCIL.

The annual meeting of the Medical Council of the College of Physicians and Surgeons of Ontario commenced on Tuesday, 13th of May, at the Council Chambers, City Hall.

After the reading of the minutes, it was decided that the Registrar, Dr. T. Pyne, occupy the chair during the election of the officers.

Dr. J. Ross moved, and Dr. John Hyde seconded, "That Dr. Macdonald be President."

Dr. J. D. Macdonald was elected on a stand-up vote by a majority of one.

Dr. Logan was elected Vice-President.

It was moved by Dr. C. V. Berryman, seconded by Dr. M. Lavell, "That the following gentlemen be a Committee to appoint Standing Committees:—Drs. Aikins, Geikie, D. Clarke, W. Clarke, Macdonald, Vernon, Irwin, Berryman." The motion was carried.

On the re-assembling of the Council all the Committees were passed separately, with the exception of the Executive Committee.

A petition was presented on behalf of the medical students, praying that they be re-examined.

It was moved and seconded, "That the petition be referred to the Education Committee." Carried.

A petition was also read from Leonard J. McKinnon, for a consideration of his case. Referred to Education Committee.

Peter H. Brice's petition for permission to be examined in his second year's papers was referred to the Education Committee, as was also the petition of W. M. Howing, M.D.

Petitions from John F. Piper, G. H. Christie, and John McCarrow, for permission to practice, were referred to the Registration Committee.

The Report of the Board of Examiners was read. For the most part the report was a defence of the Examiners to the charges made against them by the students and others.

It was acknowledged by several speakers that there was a feeling of dissatisfaction among the practitioners throughout Ontario, and that action should be taken to rid the Council of the reports that had been circulated.

Dr. Aikins thought that the fullest examination of the circumstances connected with the late trouble should be made. If any of the examiners were drunk, he would wash his hands of the affair. He thought no man should be re-appointed to any position who might degrade the Council.

EVENING SESSION.

The President took the chair at 8 p.m. After the minutes of the afternoon session had been read and approved,

Dr. GEIKIE presented the petition of Dr. Burk, praying for protection to practice until the next examination.

On motion, the petition was referred to the Education Committee.

It was moved by Dr. D. CLARKE, seconded by Dr. MCLAUGHLIN, "That an announcement shall be made public to any person or persons, who shall give competent evidence in respect to the recent alleged irregularities in connection with the Council examinations, to present themselves before the Committee appointed to investigate the matter at any time during the sittings of the present Council up to Friday noon; and no student who will give such evidence shall thereby compromise his position nor affect his interests in any way by so doing." Carried.

The Committee appointed to look into the credentials of Dr. Husband, reported that he was duly accredited to the Medical Council.

SECOND DAY—MORNING SESSION.

The proceedings of the Council were continued; Dr. J. D. Macdonald, President, in the chair.

The petition of F. H. Mewburn to have his examination in the matter of anatomy reconsidered, and his whole case referred to the Education Committee, was read.

After some remarks from Dr. W. CLARKE as to the propriety of acceding to the petition,

The petition was referred to the Education Committee.

Dr. ALLISON moved, and Dr. MCLAUGHLIN seconded, "That leave be given to bring in a by-law to amend the election by-law of 1870, and that the by-law be read for the first time." The motion was carried.

Dr. ALLISON stated that the by-law was for the better election of territorial representatives to the Council.

After considerable discussion Dr. Allison's motion, seconded by Dr. McLaughlin, "That the by-law be read a second time and referred to the Committee of the Whole," was carried.

Dr. BERRYMAN then moved, and Dr. SPRAGGE seconded, "That the sympathy of the Council be conveyed to Mrs. Campbell, on the death of our late President. We also would like to place on record the good services and constant action and intelligent administration of our affairs during his administration, and that a copy of the resolution be duly engrossed and furnished to the widow of our late President."

The report of the proceedings of the Executive during the year was then read.

AFTERNOON SESSION.

The Council assembled at 2 p.m., and went into a Committee of the Whole to consider the report of the Executive Committee of their proceedings during the past year. It was dealt with clause by clause. That which referred to the protest of students of Trinity Medical School against a by-law of the Council, insisting that the students shall give evidence of having attended 75 per cent. of the lectures delivered before they can be admitted to examination, was discussed with some spirit.

Dr. GEIKIE stated that the students of Trinity School objected to be held by a resolution not observed by other schools as regulated by the Council. Several of the professors considered it derogatory to their position to be compelled to call the roll every day in order to see who were present. This school would be willing to abide by regulations of the Council provided that all the schools were dealt with alike.

Dr. MCLAUGHLIN thought that the students should be held to the requirements of the Council in order that they might be able to prove that they attend 75 per cent. of the lectures delivered during the six months.

Dr. SPRAGGE regretted that the students of Trinity School had sent such a protest, and had threatened to test the matter in a Court of law if the Council insisted upon adhering to the resolution requiring their attendance at 75 per cent. of the lectures.

The clause was passed without any action being taken upon the protest.

Dr. WM. CLARKE spoke at great length as to the visit of the deputation to Ottawa for the purpose of soliciting the repeal of the British Regulation Act, which repeal was earnestly desired by the medical profession of Canada. Sir John A. Macdonald had received the deputation and promised to get the Act repealed, so far as it concerned Canadian students. His Excellency the Governor-General also received the deputation, and sympathizing with the profession, promised to make the necessary representations to the Imperial Government to have the Act repealed. If that were not done, great injustice would continue to be done to the profession here, as Canadian students might go to Britain, pass the examinations, return and compel registration. The position of the medical profession in Canada would be endangered if that were allowed. Sir John promised that the Canadian profession should have a copy of the Act.

Dr. BERRYMAN thought the Council were indebted to Dr. W. Clarke for the report he had given of the doings of the deputation.

The Committee rose and reported progress.

It was then moved by Dr. D. CLARKE and

seconded by Dr. LAVELL, "That the report be read and adopted." The motion was carried.

Dr. Allison's by-law as to territorial representatives was read the first time. In the second reading thereof the Council went into Committee of the Whole. The various clauses of the by-law were considered and passed, and the Committee rose.

The by-law was read a third time.

The report of the Building Committee was read by the Registrar, and adopted.

The Treasurer, Dr. Aikins, read the report, from which the statement of receipts and expenditure is taken, as follows:—

Receipts—Balance in bank from last year's meeting, $8,423 81; Dr. Pyne, registration fees, $1,442 64; professional examinations, $5,447; matriculation examinations, $1,090; interest allowed by bank, $165 56; miscellaneous, $45 80. Total receipts, $17,414 81.

Expenditure—Expenses in connection with last meeting of Council, $1,265 38; accounts ordered to be paid at last meeting of Council, $1,050 47; Executive Committee meeting, $638 70; on account of church building, Bay and Richmond streets, Toronto, together with legal services and insurance in connection therewith, $8,997 05; matriculation examiners and expenses of matriculation examination, $417 75; officers salaries, $750; miscellaneous expenses, $636 70. Balance in Treasurer's hands, $3,658 76.

Dr. BETHUNE moved, and Dr. BERRYMAN seconded, "That the report be received." Carried.

EVENING SESSION.

The proceedings were resumed at 8 p.m., Dr. Macdonald, President, in the chair.

After the minutes of the previous session had been read and adopted,

The accounts for the extra charges of the Examiners were then presented, and referred to the Finance Committee.

On the motion of Dr. BETHUNE, the Council adjourned to meet again at 10 o'clock next morning.

THIRD DAY—MORNING SESSION.

The Council met at 10 a.m., Dr. Macdonald, the President, occupied the chair.

After the reading and passing of the minutes,

Dr. ALLISON moved, "That in consequence of certain irregularities having crept into the Board of Examiners, it is deemed expedient that in the appointment of examiners in the future no member of this Council shall be nominated to that Board."

Dr. GEIKIE considered that the Council should be free of the Board, so that additional weight might be given to the decisions of the Examiners.

Dr. MCLAUGHLIN disapproved of Dr. Allison's resolution. In amendment he moved, "That the Council will always endeavour to select from amongst the registered practitioners of Ontario the best available examiners." He thought that if Dr. Allison's motion were carried out the Council would be thrown into a great many difficulties. He had known that some men appointed to be examiners, who were not of the Council, did not appear to perform their duties when the time of examination came. By having members of the Council on the Board it was possible to render great assistance to the other members of the Board. He considered that they should select the best men of the profession, whether in the Council or not.

Dr. BETHUNE supported Dr. McLaughlin.

Dr. W. CLARKE thought that the motion of Dr. Allison, and such speeches as he had made, would have the effect of bringing the Council into contempt.

Dr. HERRIMAN considered that the resolution was misunderstood, and he was in favour of having the Board independent of the Council. There were members of the profession in all parts who were thoroughly capable of conducting examinations; and in the case of students having grievances it was better that they should have the opportunity of appealing to an independent Council.

Dr. LOGAN approved of Dr. McLaughlin's amendment. He felt that more errors would be committed if the examiners were selected outside of the Council than if they were not.

The PRESIDENT here mentioned that Dr. Allison had substituted the word "difficulties" for the word "irregularities."

Dr. D. CLARKE said he must oppose Dr. Allison's motion. It assumed that which had not yet been decided by the Council. Neither had it been proven that the examiners appointed by the Council had been to blame. He agreed with Dr. McLaughlin that they should select the best men, whether inside or outside of it.

The CHAIRMAN here ruled the motion of Dr. Allison out of order.

Dr. ALLISON then amended his motion to read as follows:—"It is deemed expedient that in the appointment of examiners in the future no member of this Council shall be nominated to that Board."

The amendment was then put, with the following result:—Yeas, 17; Nays, 3.

On the request of Dr. ALLISON the original motion was voted on:—Yeas, 3; Nays, 17.

The original motion was declared lost.

Dr. HENWOOD considered that the territorial representatives were not numerically strong enough in comparison with the school repre-

sentatives. He thought if there were more country representatives in the Council it would give great satisfaction to the profession, and in view of that he moved,

"That the Ontario Legislature at its next meeting be petitioned to so amend the Ontario Medical Act as to enable each of the territorial divisions to return two representatives to the Council instead of one as at present.

Dr. LAVELL claimed that the schools should have proper representation, and said that they would never relinquish that claim.

Dr. D. CLARKE spoke to the motion. He favoured an increase, but not so large a one as that proposed by Dr. Henwood.

Several notices of motion were presented, and the Council adjourned, to meet at 2.30 p.m.

AFTERNOON SESSION.

The PRESIDENT took the chair at 3 p.m.

The minutes of the previous meeting were read and adopted.

Dr. GEIKIE moved, seconded by Dr. Morden,

That hereafter for the fees for the matriculation examiner in Toronto or Kingston, or to the Registrar of the College, a duplicate receipt be given in every case where a fee is received, one copy being sent to the Treasurer as his voucher, and one to the candidate.

The motion was lost:—Yeas, 4; nays, 16.

Dr. BERRYMAN moved, seconded by Dr. Geikie,

That no permanent position or paid office shall be occupied by any member who is in any way engaged in teaching in any university or teaching body of medicine, the meaning of the aforesaid resolution being that it alludes to the Treasurer and Registrar of the said body of the College of Physicians and Surgeons of Ontario.

During the taking of the vote on the foregoing resolution Dr. Geikie said that unless the motion was carried an appeal would be made to have it altered by Act of Parliament.

Dr. Clarke and Dr. Geikie spoke, and

Dr. LAVELL claimed that he was not excluded from any position in the Council, and held his position equally with representative men; and so long as this Council gave him a position he would attempt to discharge his duties fairly. He knew Dr. Aikins was a man whom the Council could trust, and would not take advantage of his position. He did not care whether Dr. Aikins or Dr. Geikie got the position, but he thought the motion was a reflection upon the former of these gentlemen.

Mr. SMITH, the detective, made a lengthy statement as to work done by him, and as to the difficulties under which he had to labour from time to time in the prosecution of quacks, and the expense to which he had been invariably put in such prosecutions. He said that he would perform the duties of prosecutor for $1,000, and if the total of the fines amounted to less than that sum he would do so for what he could get.

Dr. HYDE asked Mr. Smith whether he had received all the fines that had been exacted from offenders through his prosecution.

Mr. SMITH replied that he had not.

Dr. W. CLARKE moved, seconded by Dr. MORDEN, "That the case of William Smith be referred to a Special Committee."

Dr. BERRYMAN said that he thought there had been a great waste of time; that a report should have been given to the Council by Mr. Smith, and it could then have been referred to the Registration Committee.

Dr. HYDE moved in amendment, seconded by Dr. D. CLARKE, "That the case be sent to the Registration Committee."

The amendment was carried.

Dr. AIKINS stated, as a matter of privilege, that the fees for 170 matriculants paid at the Treasurer's office he (Dr. Aikins) had only received the fees from three. This explanation was given to show that he did not use the influence of his position as Treasurer to induce students to go to any school in particular.

The Council adjourned to meet at 8 p.m.

EVENING SESSION.

The President took the chair at 8 p.m.

Dr. HENWOOD moved, "That the Legislature be applied to at its next session to so amend the Ontario Medical Act as to increase the territorial representatives by five."

Dr. ALLISON thought that the Colleges should not evince opposition to the motion, and that it would be better to agree with the territorial representatives.

Dr. LAVELL was not able to see wherein the Schools had placed themselves in opposition to the profession. He said that the existence of the Council was owing to the Schools. The Schools had elevated the character of the profession. He was not afraid, nor were the professors (although such had been suggested) afraid, that by an increase of the territorial representatives their rights would be encroached upon. He said that when the Schools had conceded everything the profession had conceded nothing. He opposed the motion on account of increased expenditure, and because he thought the increase of members would decrease the efficiency of the Council.

Dr. HENWOOD said that the School men had gradually assumed control of the affairs of the Council, and the profession generally were dissatisfied with that state of things. He thought that amongst additional members they might find some whom they could place confidence in and from whom they could obtain advice.

Dr. MCLAUGHLIN considered that the state-

ment as to the Council being controlled by School men was not true. He said that the most influential spirits of the Council had been territorial representatives. He thought that if the increase were asked for both the Homœopathists and the School men would seek an increase.

On being put to a vote the resolution was lost. Yeas, 9 ; Nays, 12.

A letter inviting the Council to visit the Hospital, received from Dr. O'Reilly, was read, and it was decided that the Council do accept the invitation.

After transacting some miscellaneous business the Council rose, to meet again next morning at ten o'clock.

FOURTH DAY—MORNING SESSION.

The Council met at 10 a.m., the President occupied the chair.

After the reading and passing of the minutes,

Moved by Dr. SPRAGGE, seconded by Dr. W. CLARKE,

That the by-law requiring students to present themselves for examination before the Council in each year be amended, and that a by-law requiring students to pass a primary and final examination be substituted.

In accordance with the suggestions of several members, the motion was allowed to stand over until after the report of the Education Committee.

Dr. GEIKIE gave notice that at the next sitting of the Council he would move,

That in all cases of unsuccessful candidates, whose examination fees have exceeded $10, the Treasurer shall be and hereby is directed to repay the amount, less the sum of $10, this amount to be retained for expenses.

Also, that at the same sitting he would move—

That the Executive Committee of the Council be and hereby is directed by the Council to apply to the Legislature for a grant in aid of the Council, setting forth in the said application the claims this Council have upon the Legislature and upon the people at large—claims greater than can be urged by many bodies, however good, receiving public aid, and that such aid is necessary to assist in the establishment of a public library and museum, and to enable the Council to do all in its powers to maintain and elevate medical education in Ontario.

The Council then went into Committee of the Whole to consider By-laws 1 and 2 relating to the registration of graduates, Dr. Herriman in the chair.

Dr. CLARKE showed that the by-laws introduced were intended to operate in favour of the students of this country by making a general registration fee of $400, and granting a rebate of $350 to Canadian graduates. The system in England of granting diplomas to men who could not pass the examination here, and their being allowed by the British Medical Act to compel registration in the colonies, was a bad system, and he felt that unless the by-law were passed or the Medical Act repealed the Council would be soon broken up.

Dr. MACDONALD conceived that the sum of $400 was large, but if it were the will of the Council to fix that as the sum, he had no objection.

Dr. GRANT spoke as to the Imperial Medical Act. The status of the medical profession in this country was higher than it was thought to be by the profession at home. He considered it was high time that the Council should stand up for the rights of the Canadian profession. He believed that the British Government would not object to grant what was properly due.

The Committee rose after some further consideration of the by-laws, which were afterwards read a third time and passed.

AFTERNOON SESSION.

The Council met at 2 p.m.

It was moved by Dr. ALLISON, seconded by Dr. IRWIN, "That Dr. Pyne be appointed Registrar for the present year." The motion was carried unanimously.

Moved by Dr. ALLISON, seconded by Dr. CLARKE, "That Dr. Aikins be appointed Treasurer for the current year." The motion was carried.

Dr. GEIKIE's motion, seconded by Dr. HUSBAND, to petition the Legislature for aid (as stated in the report of the morning's session), was read and carried.

Afterwards Dr. D. CLARKE introduced a by-law which was read as follows:—"It is expedient that provision should be made by by-law for fixing the day upon which the registrar is to summon the members to meet for the transaction of business.

"Be it therefore and it is hereby enacted that the Registrar shall summon the members-elect to meet on the second Tuesday in July, 1880, for the transaction of business and organising the Council in Toronto."

The by-law, after some discussion in Committee of the Whole, was read a third time.

The Council adjourned at 4-30 p.m.

Upon the resumption of business, the order of the procedure was suspended to allow the introduction of by-laws.

Dr. CLARKE introduced the following by-law No. 8:—"As it is necessary that the lately printed registrar of the College of Physicians and Surgeons of Ontario should be legalized by by-law passed by this Council,

"Be it therefore enacted that the register last issued by the Council of the College of Physi-

cians and Surgeons of Ontario be now finally approved of and adopted by this Council."

After the by-law had been read twice it was referred to Committee of the Whole. The Committee rose and the by-law was read a third time.

EVENING SESSION.

Dr. Macdonald took the chair shortly after 8 o'clock. The minutes were read and passed, after which

The Council went into Committee of the Whole on the report of the Finance Committee, Dr. Logan being appointed chairman. After some of the items of the report had been amended, it was adopted.

Dr. D. CLARKE remarked in regard to the work done by the examiners that a better and fairer examination never had been made in connection with the profession, and that men were only accepted on their merits.

Dr. LAVELL stated that those who had been rejected from his district were righteously rejected. He felt that the examinations had been fair and honest.

Dr. BETHUNE read the third report of the Registration Committee, which was adopted without the Council going into Committee of the Whole.

THE RECENT MEDICAL EXAMINATION.

The Special Committee, composed of Drs. Allison, Ross, Bethune, Edwards, Henwood, and McLaughlin, to whom was referred the report of the Board of Examiners relative to the trouble with the students at the examinations held recently, presented the following report:—

"The Special Committee appointed to consider the rumours with regard to the conduct of the Examining Board (appointed by the Council) at the late examination, met on Wednesday, the 14th inst., all the members being present.

"After carefully reading the report of the Examiners and making a memorandum of the chief points which required explanation, we then proceeded to take evidence and make all the enquiries we could in regard to the matter as far as we could ascertain from all the evidence. There were several causes to which were attributed those complaints, namely:— 1. That the first cause of dissatisfaction arose among a few students who were rejected. 2. On account of the great number of written papers to be examined and the time that elapsed between the written and oral examinations; the students, having little or nothing to do, naturally became impatient at being kept in suspense; and a few being intoxicated and unruly created a good deal of disturbance, in which some others joined. Of this we have sufficient written evidence from some of those students who were engaged in fomenting such disturbance. 3. On account of the building lately purchased by the Council not having been in their possession long enough to get it fully prepared for all the purposes for which it was intended, the accommodation was not sufficient for so large a number of students, therefore many of them had to remain on the street or adjourn to the nearest place of public entertainment, which would, perhaps, tend to make them more impatient. 4. As to the conduct of the examiners, all the evidence tends to show that they conducted the examinations in a fair and honourable manner, and there was nothing adduced to lead your Committee to believe that any of the examiners were intoxicated, although at times they were naturally much excited. 5. There is nothing whatever to show that there was the slightest cause of complaint during the time that the written examinations were going on, and the only disturbance that occurred was during the progress of the oral examination. We have also written evidence from several students which proves that all the examinations were conducted in an impartial manner, and that they did not consider there was anything wrong in any of the questions given by the examiners. 6. Our Committee would recommend that at the next annual examination care should be taken to have only a certain number of students admitted at a time for their oral examinations.

"DR. BETHUNE, Chairman."

The above report was received and unanimously adopted.

After an adjournment to allow of the preparation of the reports, the report of the Education Committee was read, and the Council went into Committee on the Whole to discuss the separate clauses thereof.

On motion of Dr. BETHUNE, seconded by Dr. WM. CLARKE, it was resolved, "That in future students shall be subjected to a primary and final examination, and that the term of study shall be five years." The motion was carried.

It was moved by Dr. MCLAUGHLIN, seconded by Dr. LAVELL, "That no change be made in the curriculum for the present year." The motion was lost, eight voting for it and ten against it.

The motion was then referred back to the Education Committee.

FIFTH AND LAST DAY'S PROCEEDINGS.

The business was resumed by

Dr. AIKINS moving, and Dr. W. CLARKE,

seconding, "That the Finance Committee are hereby instructed to report forthwith the professional assessment for the current year."

The motion was carried.

It was moved by Dr. AIKINS, seconded by Dr. W. CLARKE, "That the Finance Committee are hereby instructed to report on the remuneration of the professional examiners for the ensuing year, and that each examiner on his appointment receive written notice of the same, and that a reply within a month be requested."

The motion was carried.

It was moved by Dr. AIKINS, seconded by Dr. LAVELL, "That the thanks of the Council are hereby given to the matriculation and professional examiners for the great thoroughness of their recent examinations." Also carried.

Moved by Dr. AIKINS, seconded by Dr. LAVELL, "That the Executive Committee is requested to prepare and publish, with all reasonable despatch, a new annual announcement, and send a copy thereof to each registered practitioner in Ontario, and to send also to the same a printed copy of the questions given at the last matriculation and professional examinations, and also a copy of the register."

It was thought by some members of the Council that unless the annual fees were paid by registered practitioners in the Province it would be in the power of the Executive to erase their names from the register, but the opinion strongly sustained in the Council was that that could not be done. And it was decided by an almost unanimous Council that printed documents of the College should be sent to all registered practitioners, and that in cases where fees are refused by these gentlemen, they should be sued for if necessary.

As to the collection of the annual fees, Dr. AIKINS moved, seconded by Dr. LAVELL, "That the Executive Committee are requested to make a thorough collection of all annual fees due by the members of the profession to this Council, making use of such means as may be necessary to effect the very earliest collection of the same." Carried.

The recommendation of the Education Committee to make the examinations preliminary and final, instead of annual, as at present, caused a lengthy discussion; but it was ultimately adopted, with some slight modification as to those who have already passed their primary.

The Finance Report, which was read and adopted, recommended that the assessment be as heretofore, viz., $1 on each registered practitioner; that examiners be paid $100 and travelling expenses for their session; also, that the examiners in anatomy receive an additional fee of $50.

Dr. MACDONALD briefly returned thanks, and the Council adjourned at 2 p.m., to meet again on the call of the President.

Miscellaneous.

Prof. Gubler, of Paris, is dead.

Charles Murchison, M.D., F.R.S., died suddenly from heart disease, on April 23rd.

ENLARGED LYMPHATIC GLANDS.—

℞. Iodoform..... 1 part.
Collodion..... 15 parts.
M. Apply locally.

CANADIANS IN ENGLAND.—G. H. Cowan, M.B., and A. M. Baines have passed the primary examination of the Royal College of Surgeons, England. Chas. M. Sheard, M.B., has passed the final examination of the Royal College of Surgeons, England, for the diploma of membership.

UNIVERSITY OF TORONTO SENATE ELECTIONS.—Hon. E. Blake was re-elected Chancellor. Prof. Loudon and Drs. Thorburn and J. E. Graham were elected to the Senate by the following vote: Loudon, 362; Thorburn, 248; Graham, 210; Houston, 202; Burns, 106.

IT IS affirmed that strong coffee, without sugar or milk, in doses of a teaspoonful every ten minutes, will arrest the vomiting in cases of cholera infantum; and a tablespoonful as often administered to an adult will arrest the vomiting in cholera morbus.

RELIEF OF PAIN FROM THE APPLICATION OF SULPHATE OF COPPER—Dr. Pick, of Vienna, observes that it was by mere accident that he discovered the means of relieving the intense and enduring pain caused by the application of sulphate of copper in diseases of the conjunctiva. As in purulent ophthalmia these applications have sometimes to be made daily, for months, the relief of such suffering is of great importance. The plan consists in sprinkling calomel over the parts to which the sulphate has been applied, four or five minutes after they have been touched. The pain immediately diminishes; and after from three to six days of this procedure, the calomel may be applied immediately after the touching with the caustic, and then the pain instantly disappears.

Aneurism of the Renal Artery.—Dr. L. A. Stimson presented an aneurism of the renal artery. It was removed from the body of a man, of sixty-five years of age, who died of gouty kidneys. When first removed it was about one-half an inch long, and of ovoid shape. It was situated just above the bifurcation. There were also several fusiform dilatations of the branches of the artery. He had not found a recorded case of aneurism of the renal artery. There were no other aneurisms in the body.—*N. Y. Patholog. Soc.*

Preserving Grapes. — Travellers say that the Chinese have a method of preserving grapes so as to have them at command during the entire year by cutting a circular piece out of a ripe pumpkin or gourd, making an aperture large enough to admit the hand. The interior is then completely cleaned out, the ripe grapes are placed inside, and the cover replaced and pressed in firmly. The pumpkins are then kept in a cool place, and the grapes will be found to retain their freshness for a very long time.

A Cause of Anæmia.—"As soon as the change is made in the dress, from that of a child, custom demands also that she should be protected by veil and gloves from the rays of the sun, and she soon becomes as blanched as a well-cultivated celery stalk. And since the blood needs the chemical effect of sun-light acting directly on the skin, anæmia is established chiefly from the deprivation. This state of the blood is a potent factor in the generation of all diseases depending on impaired nutrition, and entails conditions likely to baffle all medical effort at their removal during the menstrual life of the female."—*Emmet's Gynæcology.*

A Forerunner of Death.—Dr. Chiappelli says, in *Lo Sperimentale* (No. 1, 1879), that he has frequently noticed in patients who were apparently very far from death an extraordinary opening of the eyelids, so as to give the eyes the appearance of protruding from the orbits, which was invariably a sign that death would occur within twenty-four hours. In some cases, only one eye is wide open, while the other remains normal; here death will not follow quite so rapidly, but in about a week or so. It is easy to observe this phenomenon when the eyes are wide open; but when, as is generally the case, the eyes are half shut, and only opened from time to time, it will be found advisable to fix the patient's attention on some point or light so as to make him open his eyes, when the phenomenon will be seen. The author is utterly at a loss to explain this symptom, and ascribes it to some diseased state of the sympathetic nerve.

Koumyss for Children.—Koumyss is recommended not only in the intestinal disorders of children, but also in all diseases characterized by defective nutrition, and the following rules should be observed in its administration:—In giving koumiss to children under one year of age, always empty the contents of the bottle into a pitcher, and from that into another, and so continue to pour it back and forth until all, or nearly all, the gas is eliminated—say for about ten minutes. Then take what is necessary for one dose, and pour the remainder back into the bottle, cork, and keep in a temperature between 50° and 60° Fahr. By thus always corking and placing the bottle in a cool place after taking the dose from it, it is possible to keep it for twelve hours. It should never be warmed, sweetened, or diluted, under any circumstances whatever, nor should it ever be given less than two hours after the administration of any other form of milk.—Dr. P. Brynberg Porter, in *N. Y. Med. Journal*, March.

Local Application of Chloral in Diphtheria.—Dr. Rokitansky of Innsbruck has used a 50 per ct. solution of chloral hydrate in three cases of diphtheria where the ordinary methods had failed entirely, and was astonished at its striking effect upon the local processes. The solution was applied with a hair pencil every half hour. The pain caused by it was severe in only one case, in which the under surface of the tongue was thickly covered with a diphtheritic deposit. Intense salivation occurred after each application, and in a few minutes the pain ceased entirely. In two cases, in which the diphtheritic layer partially covered both tonsils, the pen-

cilling scarcely produced a sensation of pain. After three applications of the solution, *i.e.* in an hour and a half, large pieces of the membrane were removed with the pencil, without difficulty. The surface thus exposed was reddened; in the deep portions the finest granular formations were visible. In the two other cases the diphtheritic layer was removed after two days; the surface of the wound had granulated. In the first case the entire process had disappeared after four days. As soon as it was remarked that the normal tissue appeared the solution was gradually weakened, until, after eight days all the treatment could be stopped, since the cure was complete.—*Med. Neuigk.*, No. 2. 1879.—*Lancet and Clinic.*

Mr. Bryant, at the Meeting of the Medical Society of London, read a paper on "Operative Interference in the Treatment of Inflammation of Bone." The following conclusions were drawn:—That in acute periostitis or endostitis a free incision down to the bone, by relieving tension and giving exit to inflammatory effusion, does nothing but good, and that it should be made as early in the progress of the case as the diagnosis will justify, and, if possible, before pus has formed. The very commonly fatal termination of these cases by blood-poisoning, when left to run their course unchecked, rendered the measure imperative. That in all forms of endostitis or osteo-myelitis of long bones, in which more or less intense and persistent pain is a prominent symptom, the operation of drilling, trephining, or making a free opening into the bone, should be entertained, as any one of these measures tends to check the progress of the disease, and in most cases relieves pain. In flat bones, such as those of the head, and in cases in which the preceding measures seem too severe, the simpler operation of cutting down upon the bone and separating the periosteum from it should be performed. That in all cases of suspected abscess in bone the same operative proceedings should be carried out, the operation of trephining inflamed bone suspected to be the seat of suppuration being generally as successful in relieving pain and effecting a cure as it is well known to be when a local abscess in bone is found to exist.—*London Lancet.*

Turpentine in Whooping Cough.—(*Wiener Allegem. Med. Zeit.*)—Dr. Gerth cured a case of laryngeal catarrh by placing twenty drops of turpentine on a handkerchief, held before the face and causing about forty deep inspirations to be taken. Repeating this thrice daily, the cure was quite rapid. In the same family he found an infant fifteen months old in the convulsive stage of whooping cough, quite exhausted, and vomiting all ingesta. There was at the same time slight bronchial catarrh with slight evening rise of temperature. Gerth decided to experiment here also with turpentine. He directed the mother to hold the moistened cloth as above, before it when awake, and to drop the oil upon its pillow when asleep. The result was most happy. Within the twenty-four hours the frequency and severity of the attacks notably diminished. The child's strength was sustained by stimulants, and improvement was very rapid. Within a year pertussis became epidemic in his vicinity, and he repeatedly tested the drug in this way. He gave it to children of all ages, and in any stage of fever. The initial catarrh, the convulsive, and the final catarrhal stages were all decidedly benefited, the spasmodic attacks being in many cases aborted.—*Chicago Med. and Sur. Jour.*

Elastic Adhesive Plaster.—W. P. Morgan, M.D., writes to the *Boston Med. and Surg. Jour.*: I have been trying to find an elastic covering that, being attached to the skin, would yield to the movements of that membrane and the parts beneath it without causing an unbearable sensation of stiffness or an uncomfortable wrinkling. As there was nothing in our market to suit me, I procured some india-rubber, and giving it a coat of plaster, such as is recommended in Griffiths' Formulary under the name of Boynton's adhesive plaster (lead plaster one pound, rosin six drachms), I found the material I wished. After using it as a simple covering for cases of psoriasis, intertrigo, etc., I extended its use to incised wounds, abscesses, etc., and found it invaluable. Placing one end of a strip of the plaster upon one lip of the wound, and then stretching the rubber, and fastening the other end to the opposite lip of the wound, I had perfect apposition of the severed parts, the elastic rubbber acting continually to draw and keep the parts together. When I have been unable to get the sheets of rubber, I have used the broad letter bands (sold by all stationers) by giving them a coat of the plaster.—*New Remedies.*

UNIVERSITY OF TORONTO EXAMINATIONS IN THE FACULTY OF MEDICINE.—*Degree of M.D.*—Passed, Clarke, C. K.; Langstaff, J. E.; Lett, S. *Degree of M.B.*—Passed, Anderson, J. D; Armstrong, G. S.; Black, F.; Bowlby, D. A.; Bremner, W. W.; Buchner, D. C.; Burt, F.; Caughlin, J. W.; Chappell, W. F.; Chisholm, T.; Clapp, R. E.; Dryden, J. R.; Duck, W. B.; Geikie, A. J; Gould, D.; Hamilton, C. J; Head, J. G.; Hyde, J. G.; Kidd, T. A.; Lehman, W.; Lesslie, J. W.; Mills, R. P.; Mackid, H. G.; McCarrol, J.; McDiarmid, A; McIlhargey, J. J.; McLean, P; McKinnon, J. A.; McNamara, G. W.; Nelles, D. A.; Park, T. J.; Prouse, E.; Rowe, G. G.; Sharpe, J. W.; Shaw, F. W; Spencer, B.; Stevenson, F. C.; Sullivan, E.; Todd, J. A.; Van Norman, H. C. *University Gold Medal.*—Awarded to Burt, F. *University Silver Medal.*—1. Mills, R. P.; 2. Chappell, W. F. *Starr Gold Medal.*—Burt, F. *Primary Examination.*—Passed, Aikins, W. A.; Beatty, W.; ‡Beck, G. S.; Bentley, F.; Bentley, L.; †Brownlee, M.; Burt, J. C.; Catternole, J. F.; Chafee, C. W.; Clemens, G. H.; Clemens, L. B; Cotton, R.; Ellis, J.; ‡Gilpin, W. C.; ‡Gunn, W.; ‡Haken, G. W.; Hamill, W. E.; Howitt, F. W.; ‡Hunter, J. A.; Jones, A. C.; Lundy, F. B.; Machell, A. G.; *May, P.; Meikle, Hamilton; Milese, G. L.; ‡Munro, L. J.; ‡McCracken, C. L.; ‡McKechnie, N. J.; McNaughton, J. A.; ‡McPhatter, N.; †McTavish, D. A.; Shaw, J. E.; Shaw, J. M.; Smith, H. W.; Soper, A.; Sweetman, L. M.; Thompson, G. B.; Tracey, W. J.; Vandervoot, E. D.; ‡Walsh, G. J.; †Watt, H.; Wotherspoon, W. L. *First Professional Examination.*—Passed, §Bell, J. F.; Cleland, G. S.; Duncan, J. T.; Eastwood, W. F.; Ferguson, A. H.; Ferrier, James; §Fisher, R. M.; §Hanbridge, W.; ||Jackson, H. P.; Johnson, W. H.; Kent, F. D.; Knill, E. D.; Lafferty. J.; ¶Mennie, J. G.; Milroy, T. M.; **Montgomery, D. W.; McMahon, T. E.; Oliphant, W. H.; Panton, A. C.; Rogers, S. R.; ||Rose, D.; Wallace, R. R.; ||Woolverton, F. E. *Scholarships awarded as follows:*—Third year, Cross, W. J.; second year, Duncan, J. H.; first year, Wallace, R. R.

* To take Physiology over.
† To take Materia Medica over.
‡ To take Botany over.
§ To take anatomy over.
|| To take zoology over.
¶ To take chemistry and natural philosophy over.
** To take botany over.

TORONTO MEDICAL SOCIETY.—At the annual meeting, held May 1st, the following officers were elected:—President, Dr. J. Workman (re-elected); First Vice-President, Dr. Winstanley; Second Vice-President, Dr. Riddell; Recording Secretary, Dr. A. H. Wright; Corresponding Secretary, Dr. R. B. Nevitt; Treasurer, Dr. Geo. Wright. Council, in addition to the above-mentioned, who are members ex-officio: Drs. Oldright, McFarlane, and Covernton. The President read his annual address. Dr. Oldright exhibited a specimen of dropsy of the amnion, containing a fœtus about half an inch long and an umbilical cord fifty-one inches in length. Dr. Zimmerman showed a heart weighing seventeen ounces, with aneurismal dilatation of the commencement of the right coronary artery, and emdocarditis affecting the aortic and right mitral valves.

APPOINTMENTS.

Dr. E. W. Jenks, of Detroit, has been appointed to the chair of Medical and Surgical Diseases of Women and Clinical Gynæcology.

John Nelson Byers, of the Village of Lloydtown, Esquire, M.D., to be an Associate Coroner in and for the Counties of York and Simcoe.

Births, Marriages, and Deaths.

BIRTHS.

At Kingston, on April 23rd, the wife of Dr. K. N. Fenwick of a son.

In London, on April 24th, the wife of Dr. C. G. Moore of a son.

At Toronto, on May 14th, the wife of Dr. S. P. May, of a daughter.

On May 10th, at Montreal, the wife of Dr. Burland, of a daughter.

MARRIAGES.

On May 2nd, Harry S., son of Dr. James Allen, of Toronto, to Julia, daughter of Mr. Henry Fox.

At Ottawa, on the 8th of May, Hon. R. W. W. Carroll, M.D., of Victoria, B. C., to Mrs. E. A. Gordon, of Goderich, Ont.

At Holley, N.Y., on April 30th, A. Alt, M.D., of Toronto, to Helena, second daughter of the late T. W. Houghbating, of Albion, N.Y.

DEATHS.

At Lynedoch, April 23rd, W. C. Hagerman, M.D.

At Toronto, April 24th, Marian Augusta, second daughter of J. T. Small, M D.

At Bobcaygeon, on April 16th, Mary Eliza Phelps, wife of W. McCamus, M.D., aged 39.

At Florence, Ont., on May 8th, Hannah, beloved wife of Dr. G. A. Sivewright.

TROMMER'S

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Attention is invited to the following analysis of this Extract, as given by S. H. Douglas, Professor of Chemistry, University of Michigan, Ann Arbor.

"TROMMER EXTRACT OF MALT CO: I enclose herewith my analysis of your Extract of Malt:

"Malt Sugar, 46.1; Dextrine, Hop-bitter, Extractive Matter, 23.6; Albuminous Matter (Diastase), 2.469; Ash—Phosphates, 1.712; Alkalies, .377; Water, 25.7; Total, 99.958.

"In comparing the above analysis with that of the Extract of Malt of the German Pharmacopœa, as given by Hager, that has been so generally received by the Profession, I find it to substantially agree with that article.

"Yours truly,

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"Prof. of Analytical and Applied Chemistry."

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"	"	Alteratives	1 50
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(See Transactions of American Medical Association, for 1876, page 176.)

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TORONTO, JULY, 1879.

Selections: Medicine.

THE NATURE AND DIAGNOSIS OF NEURASTHENIA (NERVOUS EXHAUSTION).

BY GEORGE M. BEARD, M.D., NEW YORK.

Nervous exhaustion (neurasthenia) is in this country more common than any other form of nervous disease. But in spite of its frequency and importance, neurasthenia, though long recognized, in a vague way, under such terms as "general debility," "nervous prostration," "spinal weakness," "spinal irritation," "cerebral and spinal anœmia and hyperœmia," "irritable ovary," "irritable uterus," and sexual exhaustion," yet until quite recently no attempt has been made to formally introduce it into science, by describing in detail all its symptoms and showing their relation to each other and to the morbid nervous condition of which they are all the results and expressions. The purpose of the present essay is to study in detail the differential diagnosis of neurasthenia and of the functional nervous diseases allied to it and to which it leads.

The importance of making a differential diagnosis between maladies of the type here referred to and organic or structural diseases of the brain and spinal cord is incaculable; mistakes of the most solemn character are constantly being made. I have been frequently consulted by physicians, with reference to themselves, for symptoms which were supposed to indicate ataxia or some form of organic disease of the spine or brain, when in reality they only had symptoms of neurasthenia. Some of these medical men were greatly alarmed, especially after reading upon the subject in German authorities.

Distinguished from organic or structural nervous diseases, the points in the differential diagnosis of neurasthenia from organic disease of the brain and spinal cord, which it simulates, and with which it is so often confounded, are as follows:—

1. The symptoms of organic disease are usually fixed and stable, while very many of those of neurasthenia and allied states are fleeting, transient, metastatic, and recurrent. Very many of the signs of neurasthenia and allied states appear in organic affections, and in both conditions they are precisely the same, so that of themselves alone they would be no guide in the differential diagnosis; spinal tenderness, impaired nutrition of the skin and hair, shooting and stabbing and boring neuralgias, cardiac palpitation, insomnia or drowsiness, failure of memory, sexual exhaustion and emissions, mental depression, pain and heaviness in the head and back, disturbance of the nerves of special sense, hyperœsthesia and anæsthesia local or general, coldness of the extremities, twitchings of muscles—all of these and other results of the functional nervous disorders we are considering manifest themselves in spinal congestion, in ataxy, in muscular atrophy; but in functional troubles they come and go, and change about and alternate, appear and disappear and reappear without any clear cause, and sometimes utterly vanish even without treatment; in the nervously exhausted these symptoms fly about from one part or organ to another, as from the head to the stomach or back, from the upper to the lower part of the spine, from the front to the back of the head. After an organic malady

once gets established, it reveals itself by a group of symptoms that, however much they may vary in intensity are mostly fixed and constant.

2. There are certain, though not well known or always recognized symptoms of neurasthesia and allied states, which do not often if at all appear in structural disorders. Among these are general or local itching without apparent cutaneous disease; tenderness of the teeth and gums; special idiosyncrasies with regard to food and medicine which did not exist prior to the illness; morbid desire for stimulants and narcotics; morbid fear in its different phases, agoraphobia (fear of places), astraphobia (fear of lightning), anthrophobia (fear of men); sick headache; lack of desire for fluids.

3. In organic disease, reflex activity is generally diminished; in functional disease reflex activity is generally increased. There are some exceptions to this rule, as spasmodic spinal paralysis. There are "par excellence," three great centres of reflex action—the brain, the stomach and digestive organs, and the genital or reproductive system. When any one of these is irritated by over-use or direct abuse, the injury is likely to radiate or reverberate in any or all directions. In the neurasthenic one can never tell from the locality of the pain or other symptom where the disease really is.

4. Neurasthenia and allied troubles are most likely to occur in those in whom the nervous diathesis predominates. Among the chief signs of the nervous diathesis are fine, soft skin, fine hair, delicately cut features, and tapering extremities.

DISTINGUISHED FROM HYPOCHONDRIASIS.

Hypochondriasis may occur in those who are in all other respects except apprehension of disease perfectly well. Some mental diversion, such as change of scene, may cure at once; while in the neurasthenic patient, such diversion may assist the cure, but cannot accomplish it suddenly, or usually without assistance.

DISTINGUISHED FROM CEREBRAL AND SPINAL ANÆMIAS AND HYPERŒMIAS.

In neurasthenia the anæmia and hyperæmia of the brain and spinal cord are results, *i.e.*, temporary or intermittent symptoms, and not the disease.

DISTINGUISHED FROM ANÆMIA.

NEURASTHENIA.	ANÆMIA.
Chiefly found in the nervous diathesis.	Appears also in the tuberculous or rheumatic or other diathesis.
Impoverishment of nervous system; no necessary anæmia. Patient may be plethoric.	Impoverishment of the blood, increase of water, and diminution of red corpuscles.
Found chiefly between the ages of fifteen and sixty.	Found in all periods of life from extreme infancy to old age.
Not at all necessarily dependent on any important recognizable organic disease.	More frequently, though not necessarily, associated with some organic disease, as tuberculosis, carcinoma, morbus Brightii, etc.
Pulse may be full or normal, usually regular, but sometimes very rapid or very slow.	Pulse small, weak, and compressible.
No cardiac murmur.	Murmurs at the base of the heart and over the large arteries. "Venous hum" in the neck.
Easily fatigued by exertion; mental exertion in cerebrasthenia more exhausting than physical. Memory often temporarily weakened, and consecutive thought, and sustained mental activity frequently impossible, even when prolonged muscular labour causes little or no fatigue.	Easily fatigued by exertion. Physical labour always more exhausting than mental.
Insomnia a very frequent complication.	Insomnia not so frequent a complication: frequently an abnormal tendency to sleep by day as well as night.
Habitual mental depression.	Mental depression not so frequent.
No necessary or constant disturbance of the circulation.	Disturbance of the circulation, with habitually cold extremities.
Though common to both sexes, not relatively so frequent in females.	Far more frequent in females.
Is benefited by remedies that directly affect the nervous system, such as electricity, phosphorus, strychnine, zinc, and oil while iron alone is of little service.	Is benefited by remedies such as iron which directly affect the blood.
Usually recovers but gradually, and under the influence of rest, nutritious food; and various sedatives and tonics.	May be rapidly removed by the removal of the organic disease.

DISTINGUISHED FROM HYSTERIA.

NEURASTHENIA.	HYSTERIA.
No convulsions or paroxysms.	Hysterical convulsions or paroxysms.

No globus hystericus, no anæsthesia of the epiglottis, ovarian tenderness less common, and attacks of anæsthesia far less frequent and less permanent.	Globus hystericus, anæsthesia of the epiglottis, ovarian tenderness, and attacks of general or local anæsthesia.
Symptoms more moderate, quiet, subdued, passive.	Symptoms acute, intense, violent, positive.
May occur in well-balanced, intellectual organizations.	Usually associated with great emotional activity, and unbalanced mental organization.
Very common in males, though more common in females.	Very rare in males.
Is always associated with physical debility.	In the mental or physical form occurs in those who are in perfect physical health.
Never recovers suddenly, but always gradually, and under the combined influence of hygiene and objective treatment.	May recover suddenly, and under purely emotional treatment.

Neurasthenia must also be distinguished from nervous syphilis, and a common cold, the symptoms of which it often simulates.

DIFFERENTIAL DIAGNOSIS OF CEREBRASTHENIA AND MYELASTHENIA.

The symptoms which suggest cerebrasthenia (exhaustion of the brain) are obviously those that are directly or indirectly connected with the head, and they may be either physical or psychical. Tenderness of the scalp, a feeling of fulness in the ears and head, all disorders of the special senses, tenderness of gums, deficient thirst, morbid desire for stimulants and narcotics, gaping, yawning, rushes of blood to head, congestion of conjunctiva, the different forms of morbid fear, mental depression and impairment of memory and intellectual control, all indicate that the brain is chiefly affected. Certain symptoms, however, as external tenderness of the scalp, general or local itching, clamminess of the extremities, muscæ volitantes, pain and heaviness in the back of the head, may arise from exhaustion of the upper part of the spine. The symptoms that suggest myelasthenia (exhaustion of the cord) are local spasms of muscles, local chills and flashes of heat, shooting pains in the limbs, startings on falling to sleep, morbid sensations at the bottoms of the feet, as of burning or tenderness, sexual debility, pain in the back, creeping and crawling sensations up and down the spine, incontinence of urine or paresis of the bladder, feeling of pressure in the chest with or without ticklishness in that region, heaviness and stiffness of muscles simulating rheumatism, sensitiveness to cold and changes in the weather, hyperæsthesia of mucous membrane, dryness of skin or morbid perspiration, dryness of the joints, and dilated pupils. Some other symptoms, as nervous dyspepsia, numbness and hyperæsthesia, and insomnia appear to be common to both. In cerebrasthenia, physical exercise is generally well borne, while in myelasthenia, it is fatiguing and disagreeable. From this fact I derive the practical rule for treatment that in cerebrasthenia a certain amount of exercise is allowable, while in myelasthenia, relative or absolute rest is demanded. Cerebrasthenia and myelasthenia are sometimes combined, and not unfrequently alternate with each other. These facts complicate both the diagnosis and treatment.

In regard to the probable pathology of neurasthenia, my view is that there exists an impoverishment of the nerve force, resulting from bad nutrition of the nerve tissue on the metamorphosis of which the evolution of nerve force depends. As in anæmia there may be a deficiency in quantity or impairment of quality of the blood, so in neurasthenia there is, without question, deficiency in quantity or impairment in quality of the nerve tissues.—*Summarized from the "New York Medical Journal,"* 1879.

In the Journal of *Nervous and Mental Disease*, April 1879, there is an article entitled "Other Symptoms of Neurasthenia," by Dr. Beard, in which he supplements the above by analyzing more in detail some of the symptoms described, and by giving others not previously described.

Deficient thirst and capacity for assimilating fluids.—This is a frequent symptom of neurasthenia. There are many who for years have a poor appetite for fluids as they have a poor appetite for solid food; they live on a small quantity of liquid, and perhaps without suspecting it until their attention is directed to the fact. When we remember that the body is composed mostly of water, we can easily see that there is a danger of starving for want of liquids.

Abnormal Dryness of Skin, Joints, and

Mucous Membranes.—In some cases of neurasthenia the skin of the whole body is unnaturally dry; this is especially noticed in the hands, and may be accompanied with scaliness or scurfiness. Dryness of the joints may also exist.

Sweating Hands, with Redness.—Sweating of the hands is a frequent symptom of sexual debility, especially when caused by masturbation; but it can hardly be regarded as diagnostic of sexual exhaustion; nor would I, on that fact alone, decide that the genital system was at fault. Redness of the whole hand—erythema—sometimes attends palmar sweating, and in one of my cases the ears are as red as the hands.

Convulsive movements, especially on going to sleep.—Nervous sufferers, just as they are dropping off to sleep, are sometimes suddenly and painfully awakened by a violent spasmodic movement of an arm, or leg, or of the whole body, which appears without any warning, and is most likely to occur when preceded by unusual excitement or fatigue.

Atonic Voice.—The chief peculiarity of the neurasthenic voice is softness, faintness, want of courage and clearness of tone.

Oxalates and Urates in the Urine.—I have found this condition in the majority of neurasthenic patients.

Gaping and Yawning.—This system has also been noticed in organic disease of the brain.

Dilated Pupils.—Often associated with sexual disturbance, but sometimes exists where there is no such trouble. Abnormal activity of the pupils is a sign of neurasthenia.

Shooting pains resembling those of Ataxy.—Peculiarities of pain in the back. All parts of the back may be the seat of pain, although certain districts are more affected than others. There may be tenderness where there is no pain, and conversely pain where there is no tenderness.

Heaviness of the Loins and Limbs.—This is common in the myelasthenic form, and closely resembles rheumatism.

Varieties of Morbid Fear (phobia).—Among these are astraphobia—fear of lightning—which was described by me some years since. Agoraphobia—fear of places—has been described by Westphal, of Berlin. I have now under care a patient afflicted with this morbid fear. He cannot go to a certain locality, but can go very near it, and beyond that point his own will is often powerless to urge him forward. He was first attacked while in a lithographic establishment working at his trade, and from that hour he has found it hard or actually impossible to enter any building devoted to that business. I have applied the term anthrophobia—fear of society—to that morbid apprehension of going into company, which is so often seen in the nervously exhausted, especially in those sexually exhausted. One of its many phases is inability to look in the faces of those with whom they are conversing.

Hopelessness is a common symptom.

Appearance of Youth.—Persons afflicted with neurasthenia very often, and I think in the majority of cases where the condition is constitutional and of long standing, look younger than their years.

THE DIAGNOSIS OF ADHESION OF THE PERICARDIUM.

In an article in the *Berliner Klinische Wochenschrift* for December 20th, Dr. L. Riess calls attention to a comparatively rare, and as he believes, hitherto undescribed sign of adhesion of the pericardium; viz., the production of a metallic resonance of the heart's sounds (and of murmurs in disease of the valves) in the stomach. He relates three cases which have come under his observation in the Berlin General Hospital, in which the resonance was observed. In the first, a necropsy showed extensive adhesion of the pericardium over the diaphragm, as well as in other parts—there being, in fact, almost universal pericardial adhesion. The other two patients are still alive, and are subjects of valvular disease; and in both there is resonance of the murmurs through the stomach. Commenting on the three cases, he remarks that the inconstancy of the phenomenon does not militate against the explanation he gives of it; viz., that it arises from the close approximation of the heart and stomach in consequence of the pericardial adhesion. In the first case, the stomach was excessively distended; but this is not necessary

for the production of the resonance, for in the other cases there was only moderate distension, and the resonance was neither increased nor produced by artificial distension. He observes also that these cases show that the first sound of the heart or a systolic murmur may have a metallic resonance, while the diastolic sound does not manifest this character. Constancy of the sign is not to be expected; and one or more examinations may fail to detect it, although other symptoms of adhesion of the pericardium are present. When met, however, it is a valuable aid in the diagnosis. Of course, the resonance produced by cavities in the lungs, and by pneumothorax or pneumopericardium, must be excluded.—*British Medical Journal.*

THE ROLE OF THE DURA MATER AND ITS NERVES IN CEREBRAL TRAUMATISM.—(DURET). RESUME.—The dura mater contains sensory nerves eminently excitable. 1. As is the case with all sensory nerves perhaps, irritative lesions of these nerves cause: (1) pain, hyperæsthesia, neuralgia, and reflex motor phenomena; (2) reflex spasms or contractures of the muscles of animal and organic life. (*a*) The spasms or contractures of the muscles of animal life may occur in the face, eyeballs, neck, trunk or limbs. They occur sometimes on the one side, sometimes on the other. These symptoms tend to diffuse and to invade neighbouring groups of muscles. They have never the localisation, the measured and purposed character of the contractions which belong to lesions of the cortex. They frequently become transformed into permanent contractions. (*b*) The reflex vasomotor disturbances, due to irritation of the nerves of the dura mater, consist in spasms or congestive paralyses of the cerebral and ocular vessels, either on the same or the opposite side. These facts are important to pathologists, as they show the great influence of irritation of the nerves of the dura mater on cerebral vascular conditions, and on the organs of sense, and on the causation of secondary effects in cerebral traumatisms, *i.e.*, on the congestions and inflammations of the cerebral membranes. 2. Destructive lesions cause local anæsthesia of the dura mater.—*Brain.*

CHANGES IN THE SYMPATHETIC IN A CASE OF PROGRESSIVE PERNICIOUS ANÆMIA.

Dr. Brigidi reports a case of progressive pernicious anæmia, in which the autopsy revealed interesting changes in the cœliac plexus, but no fatty change or other lesion in the heart and other viscera. In the fresh state the plexus presented an excessive proliferation of nuclei, so that in many places the nerve-cells were destroyed; in other places these cells seemed pigmented, but were cleared up by the addition of reagents. The blood-vessels were empty. In ganglia, hardened in alcohol, the nerve-cells could only be found in isolated spots; in the greater part of the sections they were replaced by groups of small elements, which resembled nucleoli. From the microscopical appearances, Dr. Brigidi constructs the following chart of the pathological process:—The endothelium lining the capsules of the ganglia began to proliferate abnormally, destroyed the nerve-cells by pressure, and formed granulations, some of which assumed a bronzed or brown colour, while others underwent fatty degeneration. The further this fat development proceeded, the more the nerve-substance disappeared, until finally the proliferation of nuclei persisting, the entire nerve-substance was destroyed, and its debris was found dispersed in the newly-formed nuclear growth. The nerve fibres of the ganglia had likewise undergone fatty degeneration. The empty blood vessels of the ganglia also presented an excessive proliferation and accumulation of the endothelium. Around the ganglia there were thick layers of connective tissue, which was but poorly supplied with nerves.—*Allg. Med. Cent.-Zeit., No.* 98.

INFANT'S FEEDING BOTTLES should not have india rubber tubes, as these become coated with particles of decomposing and fermenting milk. The best kind of bottle is one with a glass nozzle, with a black rubber cap: this can be removed, turned inside out, and cleaned by thorough rubbing with salt after each use.

DOLOR FOTHERGILLI.—Nitrite of amyl inhalations proved successful in a case in which all other remedies had failed.

DEFIBRINATED BLOOD FOR RECTAL ALIMENTATION.—From the facts before them, the Committee of the Therapeutic Society of New York, feel warranted in the following conclusions:—1. That defibrinated blood is admirably adapted for use for rectal alimentation. 2. That in doses of two to six ounces it is usually retained without any inconvenience, and is frequently so completely absorbed that very little trace of it can be discovered in the dejections. 3. That, administered in this way once or twice a day, it produces in about one-third of the cases for the first few days more or less constipation of the bowels. 4. That in a small proportion of cases the constipation persists, and even becomes more decided the longer the enemata are continued. 5. That in a very small percentage of cases irritability of the bowels attends its protracted use. 6. That it is a valuable aid to the stomach whenever the latter is inadequate to a complete nutrition of the system. 7. That its use is indicated in all cases not involving the large intestine, and requiring a tonic influence which cannot readily be obtained by remedies employed in the usual way. 8. That in favourable cases it is capable of giving an impulse to nutrition which is rarely if ever obtained from the employment of other remedies. 9 That its use is wholly unattended by danger. On the use of ether with cod-liver oil, the Committee are of the opinion that the evidence before them warrants the following conclusions:—1. That the addition of ether to cod-liver oil in about the proportion of fifteen minims to each half ounce (or an equivalent amount of the compound spirit of ether) will succeed in the vast majority of cases in enabling the patient to take the oil, even though it previously disagreed. 2. That in some cases in which the oil still disagrees after the addition of the ether, the difficulty may be overcome by giving the ether separately from fifteen minutes to half an hour after the oil is taken. No facts have been laid before the Committee having a bearing upon the question as to whether the etherized oil is superior to the plain oil in its ultimate effect upon nutrition, supposing them to be equally well tolerated by the stomach.—*N. Y. Med. Journal.*

Camphor is said to relieve tobacco sickness.

Surgery.

PAINLESS METHOD OF EXCISING THE WHOLE TONGUE.

BY RICHARD BARWELL, F.R.C.S.,

Surgeon to and Lecturer on Surgery at Charing-Cross Hospital.

GENTLEMEN,—I would call your attention to this man, on whom I performed excision of the whole tongue nine days ago. You see that he is in excellent condition, and can already speak with considerable distinctness. He has taken walks outside the hospital, and wishes to go home, but I shall detain him till the proper dismissal day.

* * * * * * *

The method itself is very simple. The instruments required are a small scalpel, one or two Liston's needles, and an écraseur, or better, two écraseurs. When the patient is well under the influence of the anæsthetic, place a gag between the jaws, draw the tongue a little forward, and pass through the raphe a string, with which the organ is to be simply controlled, not dragged out of the mouth, which must be avoided. An incision, about a quarter or a third of an inch long, is now made from the hyoid bone forward, and strictly in the middle line. Thus far you will see my operation resembles Nunneley's, except that my incision is further back and shorter; but from this point the methods differ, for that surgeon passed by means of a seton-needle the loop of an écraseur chain into the floor of the mouth through the frenum of the tongue, and then dragged the part to be removed forward through the loop; and, although he could remove considerable parts by these means, he could hardly get at the whole organ, and I think his opening into the mouth too short and direct, nor did he eliminate pain.

By my method, when the raphe of the mylo-hyoid has been divided, the knife is laid aside, the genio-hyoid and genio-hyoglossus muscles are separated from their fellows by the handle of the scalpel or by the finger if the surgeon have a small finger-tip, and the root of the tongue is readily reached; but the mouth is not to be opened here. An armed Liston's needle is now placed in the wound, and the forefinger of the other hand between the

diseased side of the tongue and the jaw, as far back as it will go—viz., a little beyond the last molar tooth,—and to this point the needle is guided, taking care to keep it rather nearer to the bone than to the side of the tongue; here it pierces the mucous membrane, enters the mouth, and the thread, being released, is withdrawn, a loop of cord being left behind. The same thing is then done for the other side, except that here a loop in the mouth is unnecessary. The écraseur is now taken in hand; it must have one end of the wire detached and bent into a sort of hook at as sharp an angle as the material will bear. Tie an end of the last placed thread in the bend of this hook; then by traction on the other end, that in the mouth, draw the wire along the track of the needle. When the metal appears in the mouth just beyond the last molar tooth, pull the wire gently through till the nozzle of the écraseur is close to the supra-hyoid wound; then detach the thread and pass the wire hook into the loop of twine that enters the mouth on the diseased side of the tongue, and by gentle traction draw the metal from thus far back in the mouth, out at the hyoid wound, and attach it to the body of the instrument. Before screwing the wire tight, pass a finger along the dorsum of the tongue and ascertain its exact position. I am not afraid of its lying too far forward—it might easily, without care, sit too far back, also it might slip away from the desired place as the screw is used; therefore, having fixed the exact line along which the tongue is to be severed, I place my finger where that line intersects the raphe on the dorsum of the tongue; to it I pass the Liston's needle, letting its point project a line or two, and taking care that the wire lies behind it; by this means the écraseur can be guided exactly along the required plane. When the base of the tongue has been cut through, and the wire has come out at the wound, the loop of the same or of another écraseur is passed over the tip of the tongue into the line of incision, and the tissues, small in quantity but very vascular, which attach the tongue to the floor of the mouth, slowly cut through, when the whole organ is severed, and is removed from between the lips.

Now to call your attention to the man himself. He lost during the operation not more than ten drops of blood, and none since. He has in front of the hyoid bone a very small scar of an already healed wound,* and no other external mutilation. He has lost the whole of the tongue, well clear of the disease, as you see by the specimen, and within a line or two of the epiglottis; yet he has no fever, his temprature is normal, and he takes tepid liquids without difficulty. Whenever I have asked him if he is in or has suffered any pain, he invariably answered in the negative. It seems strange, at first sight, that an organ so sensitive as the tongue can be removed without the production of a moment's pain, especially as a good deal of suffering follows the usual modes of excision; yet, when we have considered the matter together, you will see that this is a necessary result of my method of operation. By avoiding any dragging of the tongue forward, but, on the contrary, getting the écraseur wire round it *in situ*, and by keeping that wire, just previous to its entrance into the mouth, rather near though not close to the ramus of the jaw, I divide the sensory nerve of the tongue—the lingual-gustatory—close to the bone; it then retracts into its groove, and the whole wound must of necessity be insensible to pain. Therefore the man could immediately after the operation take abundance of liquid nourishment, avoided fever, and the part has rapidly healed. I would suggest, though I have not yet had an opportunity of reducing the proposal to practice, that when a less portion of the tongue has to be removed the lingual-gustatory nerve of one or both sides, according to the extent of amputation, might with advantage be divided on the ramus of the jaw.—*London Lancet.*

Treatment of Epididymitis with the Elastic Bandage.—The customary pressure treatment of epididymal tumours with adhesive plaster straps is a complicated process, not a pleasant task for the physician, is exceedingly painful to the patient, often does not fit well,

* The very oblique and valvular communication between this wound and the cavity of the mouth renders the passage of fluids along it almost impossible; thus obviating the production of a fistula.

and lastly, requires frequent changing. These drawbacks are avoided by the method suggested by Dr. Neumann, namely, by the employment of a continuous soft rubber band about one inch in breadth. The testicle is first covered with wadding, and the envelopment commenced with the usual first circular tour. The pain should not be considerable at first, as, from the continuous pressure, it afterwards increases. The advantages of this dressing are: 1. It accommodates itself comfortably to the parts. 2. The pain is not considerable, for the application need not be made tight; its elasticity, and the continuous pressure, amply compensate for the tight compression necessary when the plaster dressing is used. 3. The dressing need not be changed if well applied at first, as it follows the diminution of the tumour, and remains in close apposition. Several cases treated in this manner by the author were cured in from four to six days.—*N. Y. Med. Journal.*

Treatment of Epididymitis. — Professor Zeissl, of Vienna, after a thorough trial of the method of Professor Hourod, of Lyons, states ("Allgemeine med. Zeitung," No. 46) that he prefers it to all the other methods he has employed. He treats all stages of the disease in the following manner: The scrotum is first enveloped in one or two thicknesses of wadding; over this is applied a square piece of India-rubber sheeting, through a hole in which the penis is passed. A suspensory is then adapted so as to support the testicles as immovably as possible. The patient is able to go about and attend to his affairs without pain or inconvenience, and the apparatus may be allowed to remain for a week. The perspiration of the scrotum is not interfered with. This is regarded as very beneficial.—"*Gazz. Med. Ital. Venete.*"

Injections of Linseed Oil for the Cure of Chronic Cystitis.—A man, aged twenty-nine years, entered hospital December 23rd, suffering from cystitis of six months' standing. Micturition occurred every hour both day and night. The urine contained a large amount of mucus and pus. The ordinary remedies were used without benefit, and finally Dr. Howe proposed to distend the bladder and keep it so as long as possible. The agent he used was linseed oil; eight ounces were used at each daily injection. After the treatment had been continued for a week, the cystitis improved. The pus and mucus disappeared. Micturition occurred only six times in twenty-four hours, and was unattended with pain.

Another patient, aged forty-nine years, was admitted with cystitis of three months' standing. Urine contained both pus and mucus. Micturition was painful, and occurred eighteen times a day. The injections of linseed oil were used as in the previous case. After eight days the pain abated, and he was able to hold his urine for two hours; but at that time he left hospital, and has not reported since.—*N. Y. Med. Journal.*

The Surgical Treatment of Anasarca.—Mr. H. Adolphus Wickers, communicates the following (*Medical Times and Gazette*, January 4).—The legs having been well oiled and a rubber sheet placed under them, about twenty or thirty punctures are rapidly made in their sides with a stout needle or hare-lip pin; some sponges which had been squeezed out in a saturated water of solution of salicylic acid are now placed against the punctures, so as to absorb the fluid as it transudes; these sponges, as they become filled, are squeezed out, and again passed through a solution of salicylic acid, before being again placed against the patient's skin. In this manner renewals may be required about every two or three hours; and four or five pints of fluid may be drained away during the first day, the whole process being possibly completed in four or five days, at the end of which time the punctures are usually healed. By the use of salicylic acid, decomposition of the dropsical fluid does not occur, the sponges are kept free from fetor, the skin is not irritated, and cutaneous inflammations of a low type are entirely prevented.—*Phil. Med. Times.*

Error in latest American Edition of Fowne's Chemistry.—Page 139, eighth line from the bottom, 100 cubic centimetres should be 1,000 cubic centimetres.

Midwifery.

ON TENTING.

BY FRED. C. COLEY, L.R.C.P. LONDON.

The operation of dilating the uterus with tents is one which is often difficult, and always more or less painful and dangerous. The object of this paper is to explain a few simple contrivances whereby the difficulties (and, therefore, to some extent, the pain and risk) may be diminished.

When the uterus is to be *fully* dilated, it will often be most convenient to commence with laminaria, and when the os internum is sufficiently patent to admit the point of the index, to complete the dilatation with sponge tents. I shall assume this course to be pursued, although no doubt it is sometimes preferable to carry out the whole process with laminaria.

It is a good plan to commence by dilating with graduated sounds. As a rule (open no doubt to a good many exceptions) a normal uterus can be dilated with sounds, even at one sitting if necessary, up to No. 12, without the use of any force involving danger, or even much pain. The usefulness of this is obvious. A larger tent, or two instead of one, can be used, and so a start is gained, and the operation may be completed, perhaps, in one sitting less—no slight advantage, as it means that the patient has so much less time to be exposed to the pain and danger of tenting. Of course, in many cases it is unnecessary, the uterus being already morbidly patulous enough to admit a tent larger than No. 12.

In cases of fibroid, and in some cases of acute flexion, the difficulty of introducing a tent consists chiefly in the crookedness of the uterine canal. If, under such circumstances, after dilating with graduated sounds, a small ordinary uterine sound be passed—or better still, Sims' uterine probe—a laminaria tent may be easily slipped in beside it, the uterus being straightened by the probe, on withdrawing which a second tent can be introduced in its place.

In ordinary cases, Dr. Barnes' tent introducer, made on the pattern of a catheter cut short, with the stylet projecting, is very convenient. But in difficult cases, where the uterus is distorted, and considerable power of directing the point of the tent is required, it seems too feeble. It easily bends. If the strength of the spike were increased, the tent would have to be weakened by enlarging the perforation. The plan above described, to some extent evades the difficulty, by getting rid, for the time, of the distortion. But it is not always applicable. To meet this difficulty I contrived the forceps shown in the figure.

It is made by Messrs. Mayer and Meltzer, of Great Portland Street. The inside of the blades is furnished with small teeth, like those of a rasp. It closes with a simple catch, so that the hand is not fatigued, nor the attention distracted by the effort of holding it shut. The tent is held so firmly that it forms with the forceps practically one instrument, which bears a general resemblance to a uterine sound with Sims' handle. I believe that with this forceps a tent can be inserted the whole distance in any case where a sound can be passed. Of course it can be used either with solid or hollow tents. I have found it very convenient, especially in difficult cases.

A great difficulty with laminaria tents is their tendency to slip out. They do not fall out. They are extruded. This is especially liable to happen when the uterus is flexed. The tent is seldom found quite free in the vagina, but with its point just below the point of flexion, with the cervix well dilated, but the os internum in *statu quo*. It is often recommended to retain the tent by plugging the vagina, but this is objectionable, as it increases the risk of septicæmia, by retaining the discharges. And it is often ineffectual, for if the uterus has much tendency to extrude the tent it will do so, maugre the plug. It is generally recommended to choose a tent half an inch longer than the uterus. But if a tent be taken about one-third inch less than the length of the cavity of the uterus, it can be passed quite into the uterus. A second longer tent should then be passed, if possible the whole distance, otherwise just into the cervix, to dilate the os externum. It will not be extruded, for No. 1, resting with its base just

within the os externum, is kept in place by it, and keeps the uterus straight and extended, so that it has no tendency to force out No. 2. In ordinary cases, if there are two tents in the os internum, and one in the os externum, the two ora will be about equally dilated when the tents are removed ; because the os internum is much more contratile than the os externum. When a laminaria tent is removed it often looks as if a string had been tied round it at the os internum, while the os externum has left little impression upon it. There is, therefore, no risk of a tent being incarcerated by the os externum.

Before attempting to introduce No. 2, No. 1 should be withdrawn by the string, till it slightly projects from the os externum, otherwise the point of No. 2 will hitch against the base of No. 1. Provided care be taken to keep the point above the inner os, it can be easily replaced by the finger, as soon as No. 2 is *in situ*.

During the whole time that the uterus is being dilated the vagina should be syringed with warm antiseptic lotion about every three hours. This lessens the risk of septicæmia, eases pain, and facilitates dilatation. It is well also to thoroughly syringe the vagina each time that the tents are changed. This is done most safely with the help of a speculum.

I think that the best instrument for introducing sponge tents is a simple stout spike with a shoulder to prevent the tent from being jammed upon it.

Sponge tents are often very disappointing, dilating the cervix largely, and leaving the os internum in *statu quo*. The base swells first and draws the point out of the inner os. This may be prevented by a disposition somewhat like that recommended for laminaria tents.

But some of the most annoying difficulties connected with tenting occur when the tents have to be withdrawn.

The loop of silk which the instrument-makers attach to the tent for this purpose is usually so short and thin that it is seized with difficulty, and breaks if the tent is held at all firmly by the uterus. A piece of whipcord, sufficiently strong, but not clumsy, should always be substituted. It should be long enough to reach one or two inches out of the vagina. This will save the surgeon a good deal of trouble, and the patient some pain.

Sometimes, however, when the os internum is very rigid, the string will tear out of the tent, and there have been cases in which the tent has broken in halves at the point of constriction. Of course, the only plan in such a case would be to dilate with another tent (which would be rather difficult), and then remove the incarcerated piece of the first one with forceps. But the accident is easily avoided by simply altering the manner of attaching the string. Let a hole be bored through a hollow laminaria tent, about half an inch from the point. Let the two ends of the string be passed inwards through this hole on the opposite side of the tent, and brought down through the hollow of the tent. The middle of the string will then go half-round the tent on the outside, and the ends will hang out at the bottom. There cannot then be any difficulty in removing the tent, if the string be reasonably strong. It will not at all readily cut through the tent, because it is placed across the grain. Nor does it, so placed, materially increase the difficulty of introducing the tent, if carefully drawn quite tight.

A similar difficulty occurs much more frequently with sponge tents. The string, as usually attached at the base of the tent, easily tears out. As a rule, under like circumstances, a laminaria tent may be readily removed with forceps. But sponge seized with forceps easily tears, so that the tent has to be removed piecemeal, the operation being more like a complicated case of craniotomy than anything else.

Thomas and others recommend that the string should be passed through the tent lengthwise. But then, if the os internum were much contracted, the part of the tent above it would be bulged out by the downward pull taking its bearing from the point, and so the resistance would be increased. Under these circumstances, it is not at all unlikely that the string would now and then tear its way out.

I have successfully used the following plan: The string is passed through the tent about half an inch from the point. Half an inch

below, another hole is made, and the ends of the string passed through it in opposite directions. This is repeated till the base of the tent is reached. The string is thus laced through and through the tent from within half an inch of the point. The first strain of the pull is always upon the base, because of friction, so that there is no bulging of the tent above the constricted point, although the string has a hold upon the whole length of the tent.

I have had tents made by Messrs. Krohne & Sesemann, with this arrangement of the string. It does not practically interfere with expansion.

The suggestions which I have ventured to make in this paper are simple, even to triviality. But, to the best of my belief, they are not to be found in any of the ordinary text books. And I think they will be found practically useful.—*Obstet. Journal.*

Double Distal Ligature (of Right Cartoid and Subclavian) in Aortic Aneurism.—At the Royal Medical and Chirurgical Society, on the 27th of May last, Mr. Richard Barwell recorded a case of successful deligation of the right cartoid and subclavian arteries, for aortic aneurism. This case is interesting, as being the first in which these vessels have been intentionally occluded on account of *aortic* aneurism, and also on account of the fact that the ligatures used in the operation were made from the middle coat of the aorta of the ox, as recently suggested by Mr. Barwell himself. Mr. Barwell has previously recorded double ligature of these vessels in four cases of *innominate* aneurism, three of which proved successful.

For Chronic Pharyngitis.—

℞ Carbolic Acid..... ʒiii.
Iodine..... ʒvi.
Iodide of Potassium..... ʒvj.
Glycerine..... ʒiii.

Apply several times daily.

To Remove Nitrate of Silver Stains.—Apply iodine and rub briskly with strong liquor ammoniæ.

Original Communications.

DIABETES.

BY THOS. W. POOLE, M.D., M.C.P.S., LINDSAY, ONT.

Author of "Physiological Therapeutics."

Since Bernard's brilliant discovery, that mechanical injury of the floor of the fourth ventricle was followed by glycosuria, the influence of the nervous system in the causation of this disease has been fairly recognized. Numerous facts further point to the vaso-motor system of nerves as specially implicated in the morbid change, on which the disease, at least in part, depends. Thus, there appears conclusive evidence that arterial dilatation is among the constant, if not the primary, phenomena of the process constituting diabetes; and as the calibre of the arteries is known to be under the control of the vaso-motor centres and nerves, the influence of this system is at once apparent. It is also of practical importance to enquire whether, in producing a dilated state of the arteries, the vaso-motor nerves are really paralyzed, (as is generally assumed to be the case,) or whether, on the contrary, arterial dilatation is the result of vaso-motor excitation, as we claim the facts invariably show to be the case. The treatment will naturally be modified as one or other of these views are adopted.

First, as to the proof that in diabetes important parts of the arterial system are unduly dilated. In connection with the experiment referred to, Bernard found the blood-vessels of the liver dilated, and "he attributed the appearance of the sugar to the increased circulation through that organ." (*Dr. L. Brunton's Handbook for the Phys. Labor.* p. 513.) Dr. H. Bence Jones quotes M. Schiff for the observation that injury of the cervical nerves as they emerge from the cord also produces diabetes, and that the vessels of the liver are simultaneously dilated. (*Braith. Retrospect*, July, 1875, p. 114). In post-mortem examinations of diabetic subjects "most marked congestion of the liver and kidney have always been found." (*Braith. Retrospect*, July, 1875, p. 67.) More recently, Dr. W. H. Dickinson, an English Hospital Physician, reports that in five cases of this disease he found the earliest alteration recog-

nized consisted in a dilatation of the blood-vessels, particularly of the arteries of the cerebro-spinal centres, with extravasation into the adjacent nervous matter, which had undergone secondary changes in consequence. These changes consisted in a degeneration and absorption of the peri-vascular nervous tissue, producing cavities or excavations, which were found in constant association with the arteries . . . in every part of the spinal cord and encephalon, attaining their greatest development in the medulla oblongata and pons varolii. The excavations were generally the most marked where the blood-vessels piercing the brain were the largest and most numerous." Dr. Dickinson refers these effects to the previously dilated condition of the vessels, the consequent thinning of the walls of which, no doubt, greatly facilitated the extravasation. He argues, very forcibly too, that these results are not chargeable to the state of the blood, inasmuch as "the veins and capillaries appeared to take no share in the morbid process," as they might be expected to do, if the extravasation were depending to any considerable extent on the condition of that fluid. Hence, he concludes, not only "that diabetes is primarily and essentially a nervous disease," but also that "a widening or distension of the arteries is the initial change in the pathological series." (*Med. Chir. Trans.*, 1870, p. 251 ; *Braith. Retrospect*, July, 1871, pp. 105-107.)

These references will suffice for this part of the subject ; and as no fact in physiology is better established than that the calibre of the arteries is under the control of the vaso-motor nervous system, we pass at once to the enquiry, Are the vaso-motor nerves paralyzed, or excited, when they thus permit or produce arterial dilatation ?

On the generally accepted vaso-motor theory, arterial dilatation is the result of vaso-motor paralysis, just as arterial contraction is held to depend upon vaso-motor excitation. We have had the boldness to challenge this theory ; and in our recently published "Physiological Therapeutics," we have cited numerous examples of the failure of this theory to account for the facts with which we believe we are justified in stating it is under no circumstances in accord. We have further endeavoured to show that the real function of the vaso-motor nerves is to dilate the arteries, (as when excited, in flushing, blushing, &c.,) and that the arteries owe their reduction of calibre to the inherent contractile power of their muscular tissue. Thus, in death, when nerve-force is extinct, the entire arterial system is contracted ; whereas, if the accepted vaso-motor theory were true, they ought to be here dilated, since nerve-force no longer induces their contraction. We cannot refer to the facts and arguments in support of our thesis, just referred to, in this place ; but, taken in connection with some additional facts regarding diabetes, we think strong ground will appear for the conclusion that in the arterial dilitation of diabetes, as well as elsewhere, the vaso-motor nerves are excited, and not paralyzed ;--and that the treatment ought to be regulated accordingly.

These facts are :—It is favourable to the view that the vaso-motor nerves are not paralyzed ; that in Dr. Dickinson's cases "such parts of the sympathitic system as were examined, [microscopically] namely, the upper cervical and the semilunar ganglia, were appearently natural," and "the nerve-cells of the brain and cord [in which the vaso-motor nerves originate] generally perfect ;" whereas, in paralysis, especially of the insane, there is often wasting of the nerve-cells.

If diabetes originated in paralysis of the vaso-motor centres in the medulla and cord, we ought to find evidence of contemporaneous paralysis of other portions of the nervous system, and as a consequence, that the onset of the disease would be characterized by weakness, exhaustion or debility. But the very opposite is the case, as a rule. Thus, M. Andral, of the French Academy, reports to that body, that of 84 cases of this disease, he has been able to trace the diabetes to defective nutrition in but very few cases, and he observes that "during the many years that I have attended persons of all classes of society, in and out of hospitals, I have met with a larger number of cases among the well-to-do than among the poor. . . . I have found more than once that persons before they became diabetic were remarkable on account of the strength of their constitution, some of them

having much *embonpoint*. Whatever, then, may be the intimate disturbance which induces —first, in the blood, and consecutively in the urine—an excess of sugar, it would seem, in more than one case at least, that this hyperglycæmia and this glycosuria, so far from representing a diminution of nutritive activity may manifest an exaggeration of this . . . . in most of the 84 cases, the diabetes manifested itself in the midst of good health." (*Braith. Retros.*, July, 1875, p. 66.

M. Andral also records the arrest of the excess of sugar, on the occurrence of a prostrating disease ; but it may be fairly regarded as doubtful how far this result was owing to a "modification of the nutritive action" or to the "suspension of alimentation" occasioned by the second disease. The writer has now under observation a diabetic patient, who assures us that when debilitated from a cold, the sugar temporarily disappears from the urine.

These facts gain additional significance when considered in the light of "another remarkable fact, viz., the disappearance of the sugar from the urine in the last stage of the existence of diabetic persons," the truth of which M. Andral states he has been able to assure himself more than once. (*Ib.*, p. 66.) Now, if diabetes depended on exhaustion or paralysis of any part of the nervous system, here is just the condition in which the glycosuria should appear in the greatest amount ; for here nerve-force is failing, and if the current vaso-motor theory were true, the arteries would be proportionally dilated, thus aggravating the condition on which Dr. Dickinson believes the disease essentially depends. On the other hand, if the undue vascular dilatation has been maintained during comparative bodily vigour, owing to vaso-motor nerve *excitation*, as nerve-force fails "in the last stage of existence," its power of dilating the vascular tubes fails also, and the arteries begin to assume that state of contraction which is complete in death ; their undue dilatation, on which diabetes essentially depends, is at an end, and the glycosuria ceases with it. How naturally this view of the case accounts for this remarkable fact !

Let us glance, as briefly as possible, at the causes which produce diabetes, in order to see how far they are consistent with the vaso-motor excitation or paralysis. And first, as to the puncture of the floor of the fourth ventricle, in Bernard's experiment. The chief vaso-motor centre is located by physiologists in this part of the medulla oblongata, (*Dr. Burdon-Sanderson, Handbook for the Phys. Lab.*, p. 245, &c.) and is certainly influenced by the operation, which is commonly referred to as producing "irritation," of the medulla. Drs. Todd and Bowman, more than once refer to excitation of nerve-function as the result of traumatic injury of nerve tissue. (*Path. Anat.*, p. 300, 304.) Dr. Ferrier found excitation of the sexual function in a monkey consequent on removal of the occipital lobes of the brain, although at the time the animal was much prostrated, (*Functions of the Brain*, p. 198) and Dr. Burdon-Sanderson interprets as "excitation of the ganglion of the septum" of a frog's heart, the effect of ligaturing the inferior vena cava, or excising it, "preferably with a blunt scissors." (*Handbook*, &c., p. 277-8.) These examples leave no room to doubt the propriety of regarding puncture of the fourth ventricle as producing an *excitation* of the implicated or contiguous vaso-motor centre, and of accounting in this way for the vascular dilatation which follows. If any additional proof of this view be necessary, Prof. Kuss supplies it to us in his lectures on physiology. He states :—"The congestion of the liver and excitation of its glycogenetic which follow a puncture made in the fourth ventricle do not, however, appear to be produced simply by a (nervous) paralytic hyperæmia, arising from the abolition of the vaso-motor innervation ; because the artificial diabetes thus produced is but temporary (lasting at the most twenty-four hours). This diabetes appears rather to arise from the *excitation* of certain nerves included in the network of the great sympathetic nerve, and which are to the liver what the chorda tympani is to the sub-maxillary gland. (*Trans. by Duval. Amory*, p. 273).

Schiff found that section of the posterior (sensitive) roots of the cervical spinal nerves caused temporary diabetes, which he regarded as the effect of the "irritation" thus produced. (*Dr. W. Bence Jones, Braith. Retros.* July, 1865, p. 114.) That section of the roots of these cen-

tripetal nerves should excite the contiguous vaso-motor centres of the cord, and even of the medulla, is highly probable, and his explanation of the consequent dilatation of the arteries and the production of diabetes is quite in accord with the physiological intepretation of other operations on nerve tissue, and with the opinion of Professor Kuss, just quoted.

Each of the following operations is attended with the appearance of sugar in the urine; and though it would be impossible to show that they occasion dilatation of the vessels of the liver directly, or through an excitation of the vaso-motor nerves, it is quite possible to show, on physiological grounds, that this dilatation is produced indirectly through the operation of collateral causes. The operations which thus produce diabetes are :—

Ligature of the inferior vena cava, below the liver, in the frog.

Faradization of the central end of the cut vagi, or of the medulla oblongata.

Section of the anterior roots of the cervical nerves.

Section of the sympathetic nerves connecting the spinal cord with the inferior cervical ganglion.

Extirpation of the inferior cervical or first dorsal ganglion.

These several operations, apparently so different, have this in common, that they all tend, in a special manner, to lessen the circulation of blood in the lungs, and to produce a marked hyperæmia and distension of the liver,—the very condition so intimately associated with the production of diabetes.

Thus, tying the inferior vena cava, below the liver, causes the blood reaching the heart and lungs through that channel, to pass, by anastomoses existing in the frog, into the portal vein, and through the capillaries of the liver, where it is not only greatly retarded, but produces the hyperœmia, dilatation, and diabetes referred to. (See Prof. Kuss, Lec. p. 273.)

Faradization of the central end of the cut vagi, or of the medulla, which is practically the same, seeing that extra-polar conduction through the brain substance for a considerable distance is a demonstrated fact (*Dr. Ferrier, Func. of Brain*, pp. 132, 133), arrests the circulation of the blood in the lungs in two ways: first by paralyzing the action of the motor respiratory nerves, especially the phrenic, producing spasm of the respiratory muscles, which fix the chest in a state of tetanic expansion, and Prof. Kuss shows how certain this state is, even when voluntarily induced by efforts at forcible expiration, to arrest the heart. (Lec. pp. 143, 313). Secondly, by diminishing the proportion of oxygen in the circulating blood, which, Dr. Burdon Sanderson says, "determines general contraction of the smaller arteries" (*Handbook*, p. 333); and thirdly, by paralyzing the sympathetic vaso-motor nerves, originating in the medulla, the dilating power of which over the pulmonary arterioles being withdrawn, these tubes contract from their own inherent power, as they do in death, arresting the pulmonary circulation. As a consequence of this arrest from any cause, the right ventricle is unable to empty itself, or is able to do so only in proportion as blood stasis in the lungs is incomplete, from the use of a moderate faradic current. Blood is accumulated in the auricle, vena cava, hepatic veins, and liver, as in the previous experiment, and with similar results. We have so far been treading on the solid ground of physiological experimentation and its recorded results. If we were to venture to draw inferences as yet unproven, from general facts, it might easily be shown that section of the anterior roots of the cervical nerves, by cutting off the innervation of the phrenic, produces results on the respiration and pulmonary circulation, with consequent dilatation of the hepatic vessels, similar to those mentioned above; and doubtless when the effects of extirpation of the inferior cervical ganglion, and of other injuries to the great nervous circle here in action, are better understood, the explanation of these operations in producing diabetes, will be found in accord with the explanation of this effect from the more striking operations referred to above.

Among the alleged causes of diabetes are injuries of the head, as by blows, falls, &c., apoplexy, tumours of the brain, and other sources of cranial irritation, mental excitement, rage, grief, anxiety, sexual excitement, &c., which if not all directly tending to vaso-motor functional exaltation, may so tend indirectly, by disturb-

ing the relative harmony of the various portions of the brain, and while depressing or paralyzing some, cause additional functional activity in others. In this wonderful "harp of a thousand strings," causes which impair or silence some, may induce others to vibrate with increased intensity.

It may be objected that the loss of energy, dullness, impaired vision, and other signs of cerebro-spinal depression, sometimes present, are inconsistent with excitation of this portion of the sympathetic system. But it must be remembered, that besides the inherent differences between the functional activities of these two nervous systems, the lassitude and other symtoms referred to, are the effects of the waste going on in the body; are not among the causes producing the disease; are often long postponed, and do not constitute an essential part of its phenomena.

The inhalation of chloroform and æther, and occasionally the intoxication of alcohol are followed by glycosuria. Bernard and Dr. Harley have shown that the injection of either of these substances or of ammonia into the portal veins is more certainly productive of that result. Both these distinguished observers attribute the effects of the latter experiment to irritation of the liver and its blood vessels. Dr. Harley is of opinion that the terminal branches of the pneumogastrics are thus excited, that they convey a corresponding impression to the medulla oblongata, which is from thence transmitted through the cord and sympathetic by way of the splanchnic nerves to the vessels of the liver, which dilate in consequence. Dr. Harley here evidently had not the fear of the advocates of the present vaso-motor theory before his eyes, for his view of the case is as treasonable towards that theory as we could desire. We quote his view, as first stated, from Dr. Anstie (*Stim. and Narcot.* p. 279), who, while differing in opinion from Bernard and Harley, has furnished the results of several experiments, which show that at least the full narcotic and paralyzing effects of æther inhaled, are not favourable, and indeed in his hands failed, to produce sugar in the urine; while he adds, "any one may readily convince himself experimentally (as I have done) that *a much less quantity* of æther will produce diabetes within a few hours, if life be prolonged." (pp. 284). His argument is that diabetic urine is a part of the full narcotic and paralyzing effects of æther, but his experiments prove rather that it is the moderate, or earlier effect of æther, which elsewhere he shows to be that of a stimulant, which produces diabetes. Indeed it was by a dose of æther, swallowed, from which he experienced flushing of the face, palpitation of the heart, increased frequency and force of the pulse, which at one time became bounding, (evident signs of vaso-motor *excitation*) that he found among the results the production of artificial diabetes. (*Ib.*, pp. 286-7). With these results from Dr. Anstie, notwithstanding his argument, and under the ægis of Bernard and Harley, we may well leave this part of the subject with the reader, with the single additional observation that the slight variation of the pulse in æther and chloroform inhalation shows the vaso-motor centres and nerves to be but slightly affected in ordinary cases; and as the sympathetic system is the last to become paralyzed in extreme narcosis from these agents, its ganglia may, and the facts show that they are, often undergoing the primary stage of excitation after the sensory centres of the cerebrum are functionally paralyzed. Where the process is not pushed to the paralyzation of the sympathetic (in which case death would be imminent), the excitation of this system, in the earlier stage, or the more moderate use of the anæsthetic, fully accounts for the vascular dilatation, as the result of vaso-motor excitation, and with this for the temporary diabetes.

The inhalation of the nitrite of amyl also produces sugar in the urine. Dr. B. W. Richardson was manifestly in error when he, doubtless inadvertently, alluded to this drug as "the most potent known paralyzer." Dr. Minor, (*Virginia Medical Monthly*), in an article "On nitrite of amyl as a cardiac stimulant," refers to "the powerful action of amyl nitrite, and the beneficial results which might follow its administration in certain cases calling for prompt cardiac stimulation." (*Practitioner, Braith. Ketros.* Jan. 1879, p. 231). Dr. C. T. Williams (Brompton Hospital) regards it as "a violent cardiac stimulant." (*Ib.*, Jan. 1874, p. 95.) The remarkable flushing it produces is well known.

Excitation of the vaso-motor system, increased action of the heart, dilated arteries, and temporary diabetes, appear here inevitably associated together.

It thus appears that agents which act upon the circulation as stimulants, produce or aggravate the glycosuria. Let us see how it is with those remedial agents which counteract this state. Among these, opium and its compounds have long held the foremost place; and opium and morphia, in appropriate doses, as is well known, produce arterial contraction, and in consequence are of marked utility in inflammatory and congestive states. This distinctive quality of their action, in reducing vascular dilatation, is ably discussed in an article entitled "Antiphlogistic Powers of Morphia," by Dr. J. Z. Lawrence, F.R.S., *Med. Times and Gazette, and Brit. Amer. Jour.* of Montreal, vol. i. p. 179. Even the ipecacuanha of Dover's powder is to be credited with similar qualities, or how else could it have acquired the title of "anti-dysenteric root?" With the exception of such remedial agents as lactic acid, which may be regarded as dietetic in its effects, and those of the alkaline waters, as of Carlsbad, &c., or alkaline mixtures, which act chemically upon the blood, we shall find that most of the drugs which have been used advantageously in diabetes, to a greater or lesser degree, act by reducing vascular dilatation, and inducing a state of contraction in the arterioles. Such is undoubtedly one of the effects produced by bromide of potassium and the other bromides, by the mineral acids, by creasote, by the tinct. ferri. mur., by the sub-acetate or acetate of lead, and the few others which have proved of any service. Of late, we have seen that ergot of rye has been recommended for this disease, and in view of the facts regarding the dilatation of important parts of the arterial system, and the power of ergot to counteract that state and produce arterial contraction every where in the organism, (*Dr. W. A. Hammond, Dis. Nerv. Syst.*, p. 293) this drug, ought to be one of the most important remedies for diabetes. But it ought to be used in the initial stage of the disease, and in full doses, before permanent dilatation and consequent organic changes have been fully established.

How do these drugs act? They are mostly narcotics and paralyzers; and a reference to their complete action will satisfy most persons that it is not as *stimulants* they act in reducing the calibre of dilated arteries, promoting arterial contraction, and so putting an end to congestion or arresting hæmorrhage. And yet this is their mode of action under the vaso-motor theory generally accepted, according to which vaso-motor excitation induces arterial contraction. Arterial contraction, however, occurs under circumstances when vaso-motor excitation, or even ordinary nerve-power, is impossible,—as in death,—and this temporary death or paralysis of the nerves is just what we claim these agents produce, permitting the unrestrained exercise of the inherent contractile power of the muscular tissue of the arterial tubes. Having discussed the subject at length elsewhere ("Physiological Therapeutics"), we cannot refer to it further here.

In so far as diabetes is concerned, the facts show that dilatation of the arteries is intimately associated with, if not an essential portion of, the phenomena of this disease.

That the causation of this dilatation, whether operating naturally or artificially, is consistent with excitation rather than paralysis of the vaso-motor centres and nerves.

That agents which may justifiably be regarded as stimulants to vaso-motor nerve-power, by increasing arterial dilatation, produce or aggravate the disease.

That agents which may be properly regarded as paralyzers of vaso-motor and other nerve-force, lessen abnormal arterial dilatation, tend to promote arterial contraction, and in this way exercise a favourable influence over the disease.

That among these, ergot of rye is pre-eminent, and deserves to be extensively tried, more especially in the early stages of the disease, when alone morbid organic changes can be successfully combatted.

Chloral hydrate enemata are highly recommended by Starcke in cases of gastric irritation. The dose should be smaller than it would be if given *per orem*. Fifty centigrammes are sufficient.

CASE OF PEMPHIGUS FOLIACEUS.

BY J. E. GRAHAM, M.D.

(*Concluded.*)

May 15. Patient is gradually becoming worse; the delirium continues, and the emaciation is more marked. He has not now taken any medicine for some weeks.

May 22. This morning the blood began to ooze from large denuded patches which exist on the legs. He irritates the skin very much by scratching, so that his attendants had to bind his arms to prevent him from injuring himself. He had to-day some strong convulsions.

May 23. The bleeding continues in considerable quantities. Pulse weak; legs have become livid; stimulants were given without effect. Died at noon. I forgot to mention that for the last three or four days patient has refused to take any nourishment whatever. During the whole time he has been in the hospital he has taken his food well, and there has been no irritability of the stomach.

Post-mortem, twenty-four hours after death. The body is a good deal emaciated. Face and chest covered with scabs. On the thighs and legs there are large patches of integument, denuded of epidermis. The fore-arms and arms are of a dark, livid colour. The scalp is also denuded of epidermis.

Head. Brain weighed 3 lbs. 8½ oz. The pia mater is congested. Puncta vasculosa prominent. The brain is otherwise healthy.

Thorax. The heart weighs 5¾ oz. On removing the heart found the blood to be in a very fluid state. No attempt at coagulation. No valvular lesions. Nothing further to note concerning the heart, except its smallness and thinness of its walls. The lungs are healthy. Old pleuritic adhesions were found on both sides, and puckered cicatrices at both apices.

Abdomen. On opening the peritoneal cavity, a slightly congested condition of the small intestine was discovered. Liver weighed 3 lbs. and 6½ ounces. The principal lesions were found in the stomach, near the pyloric orifice, and in the kidneys. The kidneys were small; the right was larger than the left; the weight of the right, 4½ ounces; of the left 3 ounces. There was a small renal calculus in the pelvis of one of the kidneys. The capsule was adherent, leaving a slightly granular surface when stripped off; the cortical portion was somewhat wasted. The microscope showed moderate increase of the connective tissue in the cortical portion, with advanced granular degeneration of the renal epithelium; most of tubes being choked with these cells and granular debris, the nuclei in many instances having disappeared. The coats of the arteries were greatly hypertrophied. In the medullary portion there was proliferation of the renal cells, which were much healthier in appearance than those of the cortex. The mucous membrane along the lesser curvature of the stomach was congested, and about twenty spots were discovered which nearly resembled some of the patches of eruption on the skin. The spots varied in size from that of a pea to a ten cent piece, and on close inspection were found to consist of superficial ulcerations, some extending partly and some altogether through the mucous membrane. They could not have been in existence longer than two or three days, as before that time his stomach was in good condition, and he digested food well. The small intestines were healthy, with the exception of the superficial congestion on the peritoneal coat mentioned before. The mucous surface of the large intestine was very much congested and thickened in some places.

From the post-mortem appearance one would conclude that death, which seemed to be inevitable from asthenia, was hastened by the eruption, so to speak, on the mucous surface of the stomach.

NEW METHOD OF TREATING BURNS.—Dr. Winternitz has proposed a new treatment for burns. The injured part, be it a burn of the first, second, or third degree, is covered with a piece of very fine muslin, care being taken to avoid folds. Above this first stratum, which should not be removed, cold compresses are laid; the latter are to be renewed with greater or less frequency, as circumstances may require. A constant temperature may also be maintained by the aid of an irrigation tube. The pain is thus rapidly relieved, the parts protected from irritation, and recovery greatly accelerated. Clinical observations have demonstrated the superiority of this method of treatment.—"*Giorn Ital. delle Scienze Med.*" and "*Gazz. Med. Ital. Lombardia,*" No. 50, 1878.

Translations.

A Rational Curative Treatment of Uterine Prolapse.

DR. SAVAGE.

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Before applying the treatment we should seek for the cause of the disease; our proceeding is applicable only to prolapsus resulting from relaxation of the suspensory ligaments of the uterus, no matter what may be the cause of this relaxation—efforts, fall, accouchement, &c., and it is not applicable to prolapsus due to any organic affection of the womb, or caused by pressure exercised upon it by an abdominal tumour. Inflammations, ulcerations, discharges, and other secondary complications should be actively combated.

We arm ourselves with pure tannic acid, and ourselves make a *concentrated* solution of it in water, *at the moment of using it.* A score of little balls of charpie are made, and are allowed to soak thoroughly in the solution. A brush (camel's hair), with a long handle, is to be in readiness. The woman being in a suitable position, a speculum is introduced into the vagina which reduces the uterus, or the reduction may be effected before its introduction. The brush is then dipped in the tannic acid solution, and being carried through the speculum, the uterine neck and the whole internal surface of the vagina is several times freely bathed, the speculum being withdrawn little by little, but reintroduued afterwards to pack the balls of charpie soaked in tannin in the uterine culs-de-sac, by means of a long pair of dressing forceps. The culs-de-sac are thus firmly packed, and the speculum being gradually withdrawn, the whole cavity of the vaginal canal is filled with these same balls, and the vulva is closed by a charpie tampon, which is externally supported by a compress. Complete rest in bed is observed, and twenty-four hours after its application the charpie is gently withdrawn, pellet by pellet. Cold vaginal injections, composed of a strong decoction of dried oak bark, are then prescribed, to be used three times a day. Before each of these injections the womb should be restored to position. At the end of two or three days at most this operation is repeated, and so on, increasing little by little the intervals between the applications of the dressing; and even after it is thought that a cure has been obtained, the injections alone should be continued for fifteen days or so.

Such is our proceeding: it is very simple, inexpensive, applicable at all times and in all places, necessitating neither special apparatus nor substances difficult to procure, nor traumatism of the genital organs; it is entirely painless, very easy of application even for the most inexperienced physician, and secures at the end of some months an absolute and veritable cure of uterine prolapse. (Five confirmative cases are then cited in vindication of the method. Trans.)—*La France Médicale.*

Abscess of the Tonsils.

According to M. Verneuil, the purulent focus, whose development is the termination of amygdalitis, is not located in the interior of the tonsil itself, but without the gland, in the cellular tissue which separates it from the bottom of the bed in which it is contained. The tonsil adheres only in a very lax fashion to the walls in which it is imbedded. When it swells under the influence of inflammation, it projects between the anterior and posterior pillars of the velum-palati; and during every motion of deglutition, it presents, owing to the absence of close connections, slight to and fro movements—a fact which it is easy to establish by examining the back of the throat. This mobility is not uninfluential in the production of abscess. From the fact of the continual displacement of the gland, there forms without the tonsil a serous-pouch in the connective tissue, which extends from one pillar to the other, and fills up the bottom of the tonsillar fossa. It is in this serous-pouch that the purulent collection is developed. The abscess is always very deeply situated, and it is extremely difficult to attack it with a bistoury. An incision directed against the prominence which the tonsil forms in the isthmus of the fauces has no chance of reaching it. In order to open it, it is necesary to traverse the anterior pillar of the velum-palati; it is this pillar which, enlarged and pushed forward, forms the anterior wall of the abscess; but the anterior pillar is constantly thickened by œdema, and in order to traverse it, a very deep incision is necessary, an incision which one dare scarcely make sufficient for fear of wounding the carotid artery. In fine, the precept which results from the researches of M. Verneuil, is to abandon the abscesses called tonsillar to their natural evolution. We should not seek to open them, but rather wait until the pus makes for itself a passage through the anterior pillar. Moreover, this spontaneous termination of the affection does not necessitate a long expectance: from the fourth to the fifth day the abscess opens of itself.—*L'Union Méd. du Canada,* from *Gaz. des Hôp. and Lyon Médical.*

THE CANADIAN
Journal of Medical Science,
A Monthly Journal of British and Foreign Medical Science, Criticism, and News.

TO CORRESPONDENTS.—*We shall be glad to receive from our friends everywhere, current medical news of general interest. Secretaries of County or Territorial medical associations will oblige by sending reports of the proceedings of their Associations to the corresponding editor.*

TORONTO, JULY, 1879.

TO OUR SUBSCRIBERS.

We again appeal to all subscribers in arrears to pay up. A glance at the address label on their journals will at once inform them when their subscriptions, in advance, became due. Many are in our debt, and will greatly oblige by attending at once to this notice. We hope that it will not be necessary to refer to this important matter for some time.

THE ONTARIO MEDICAL COUNCIL.

The last session of the present Medical Council, representing the College of Physicians and Surgeons of Ontario, has been brought to a close. Like all its predecessors it has been characterized by puerility, incapacity, and unseemly wrangling. Should such another council be returned at the next election, and a similar five years' experience again have to be recorded, we are persuaded that a long-suffering and much-disgusted profession will at length rise in its might to banish these abuses, and, in that event, the inevitable fiat cannot be long deferred: *Delenda est Carthago.* To an impartial on-looker the proceedings of the council are simply disgusting. The log-rolling, the wire-pulling, the open interference of outsiders, and the mutual recriminations freely and incessantly indulged in by members, might perhaps be tolerated in a County Council or even a Local Legislature; but, when rampant and running riot in an assembly supposed to be composed exclusively of professional gentlemen, the unedifying spectacle cannot fail to fill one with ineffable disgust. The inordinate amount of time wasted, at a very considerable expense to the profession, in profitless discussions of unimportant matters and personal differences, might perhaps be condoned if, in the end, an opportunity were found for conferring some palpable benefit upon the profession; but the practice of making enactments one year merely for the purpose of rescinding them the next has brought the legislation of the council into such disrepute that it would indeed prove a veritable surprise to find a *bona fide* act issuing from its deliberations.

The choice of Dr. J. D. Macdonald, of Hamilton, as President, was a wise selection, and cannot fail to command universal approval, as that gentleman does respect. The judiciousness of this selection repeatedly became apparent throughout the meeting, and goes far towards constituting a redeeming feature in the session. The appointments to the Executive Committee, too, appear to us to have been prompted by a wise and prudent wish to obviate in the coming year the repetition of past unpleasantness, and the reiteration of insinuations and inuendoes little calculated to advance that body in the general esteem. An ill-timed and ill-judged motion in the hands of Drs. Berryman and Geikie, apparently directed against Dr. Aikins' occupation of the treasurership, was very properly voted down by an overwhelming majority; and the attempt to asperse that gentleman's character after the long period of his faithful service, was fitly characterized by different speakers in terms the strength of which could only be justified by the occasion. The monstrous charges by certain examiners for services rendered at the late examinations were very righteously resisted, and the threat to compel payment by legal process was met in a becoming and dignified manner. It will not be forgotten that the Council of Medical Education was much scandalized through the late examinations, and we hold that there was an excess of generosity manifested in the $75 additional grant to each examiner—an excess which the depleted condition of the exchequer would scarcely seem to justify. It will be a matter of surprise to no one to learn that the report of the committee appointed to enquire into the alleged irregularities and misconduct at the late examinations was as incomplete and unsatisfactory as such

reports always are. Unfortunately this is not the first occasion on which similar deplorable occurrences have been complained of; still more unfortunately the yearly iteration of such complaints has made the scandal so widely current that it is now "babbled by the babe," not "whispered in a corner." Notwithstanding this, the reappointment of Drs. Sullivan and Malloch as examiners for the ensuing year will meet with general acceptance and approval. One of the most important acts of the session was the reversion to the old system of primary and final examinations in place of the annual examinations introduced three years ago. This we regard as a step in the wrong direction for reasons very lucidly set forth by Drs. Aikins and Daniel Clark in the able speeches delivered by them on the floor of the Council. The eloquent and otherwise excellent harangue of Dr. Clark was somewhat marred and lost effect through a slight exhibition of temper and a personal allusion to Dr. Hyde, a blemish which we greatly regret and deprecate, much grieving "that our greatest are so small." The change in the system of examinations is much to be regretted in the interest of the students, but, believing as we do, that the Council was induced to make it mainly in consequence of the riotous conduct of students at the late examinations, we venture to commend to their sobered judgment the realization of the fact that they have chiefly themselves to thank for the misfortune which has come upon them.

With reference to the proposal to increase the number of territorial representatives we are bound to say that we differ *toto cœlo* from its advocates, believing that the Council is already too large and unwieldy, a circumstance which is the source of much unnecessary confusion and expense. It is the proud boast of the constitution of that Council that the general profession has a representation therein far in excess of that in any other Medical Council in the world; if then, it be thought that the weight and influence at the Council Board of the great body of general practitioners unconnected with Universities or Schools be not now sufficient, we would venture to suggest that the remedy be sought in the direction of a more discriminating and judicious selection of the Territorial Representatives. For model men of this description commend us to Drs. Daniel Clark and Ross. We mention these two names with no desire to institute invidious comparisons with those unnamed, but merely for the purpose of indicating the characteristics which each is known to possess as constituting qualifications especially calculated to be of service in the work and deliberations of the Council. Although we differ from the last named gentleman on some points, yet we can none the less respect his honesty of purpose, independence of judgment, persistence and assiduity in business. The election of Territorial Representatives takes place before another meeting of the Council, and if the next Board be found lacking in territorial weight and influence we believe it will be the fault of the electors themselves. Let them see to it, therefore, that the well-founded boast of our system of representation be not in the future, as in the past, an idle rodomontade.

TROMMER EXTRACT OF MALT.

We have used the Extract of Malt manufactured by the Trommer Extract of Malt Co., of Fremont, Ohio, and have found it to be a preparation of very great value. The virtues of good Malt Extract in many ailments are rapidly becoming so well known that it scarcely needs a word of commendation from us, except to give our opinion of the properties of the preparation and its compounds, as now so extensively manufactured by the firm above referred to. It is indicated in all diseases accompanied or caused by impaired nutrition, simple or tuberculous, acute or chronic. In the convalescence of fevers, pneumonia, bronchitis, etc., the wasting diseases of children, joint affections, the emaciation accompanying uterine disorders, certain forms of dyspepsia, neuralgia—in fact, in cases where we would expect *food medicines* to be beneficial, the Malt Extract alone, or at times combined with iron, hypophosphites, pepsin, etc., will give most satisfactory results. One of the best tests of the value of an article is the quantity consumed; and we are informed that the Company is sending out immense quantities, not only throughout Canada and the United States, but also to Europe, where their malt stands high in the estimation of those

who are perhaps slower to adopt anything new or foreign than we are on this side of the Atlantic. The following is from the *British Medical Journal*, of April 19, 1879:

"Malt-extracts of the kind, consisting of the soluble constituents of barley-malt not fermented, appear to have considerable value in maintaining and strengthening nutrition. They are rich in malt-sugar, dextrine, and diastase, and correspond with the extract of malt of the German Pharmacopœia of which Niemeyer, Oppolzer, and other German physicians speak very highly. Hoppe-Seyler points out that, while the dextrine possesses the property of increasing the activity of the gastric secretion, and the diastase assists in converting starch into glucose and dextrine, the malt-extract includes also a combination of malt-sugar, alkalies, and phosphates, which together make it a nutrient and medicinal agent of great value. There is, indeed, an accumulation of clinical evidence that malt-extract is capable of taking the place of cod-liver oil, to a large extent, in the treatment of phthisis and other wasting diseases. In Ziemssen's Cyclopædia, vol. xvi., it is said to almost entirely have taken the place of cod-liver oil at the Basle Hospital, without any reason having been found as yet for returning to the use of the latter remedy. The extract is given from one to three times a day, in doses varying from a teaspoonful to a tablespoonful, in milk, broth, beer, or wine."

In cases of enfeebled digestion, and in all chronic wasting diseases, we can strongly advise its administration, either plain or in any of its combinations that the nature of the case may indicate. Mr. R. L. Gibson, Agent for the Trommer Extract of Malt Company, is desirous of securing reports from physicians of their experience in the use of these preparations, and requests us to say that such courtesy would be very highly esteemed. (Address: P. O. Box 724, Montreal.) He will also be glad to answer any enquiries, and to furnish samples on application.

THE BICKFORD KNITTING COMPANY'S PATENT SEAMLESS SKIN-FITTING SHIRTS.—We have examined these shirts, and can bear testimony to their excellence. The treatment of Potts' disease of the spine by the application of plaster of Paris jackets has, thanks to Dr. Lewis A. Sayre, lately become widely and deservedly popular, and to carry out this treatment successfully, attention to its minutest details is essential. One of these—and a very important one—is a closely fitting shirt that will not cause irritation at any point. This essential can be secured by using the shirts of the Bickford Company, whose advertisement appears in our columns.

Book Notices.

Tenth Annual Report of the State Board of Health of Massachusetts. January 1879.

Excision of the Epiglottis. By WM. PORTER, A.M., M.D., St. Louis.

Urethrismus, or Chronic Spasmodic Stricture. By F. N. OTIS, M.D., New York.

Further Contributions to the Treatment of Lupus. By Henry G. Piffard, M.D., reprinted from the *Medical Record.*

The Canadian Journal. Proceedings of the Canadian Institute. New Series, Vol. I., Part I. Toronto: Copp, Clark & Co., 1879.

Contributions to the Pathological Anatomy of the Human Eye. By Dr. ADOLPH. ALT, of Toronto. No. XIII.

Tenth Annual Report of the State Board of Health of Massachusetts. January, 1879. Boston: Rand, Avery & Co., 118 Franklin Street.

The Difficulties and Dangers of Battey's Operation. By GEORGE J. ENGLEMANN, M.D. Philadelphia: Collins, Printer, 705 Jane St., 1878.

Thirty-third Annual Announcement of Starling Medical College, together with Catalogue and Order of College and Hospital Exercises. Session 1879-80. Columbus, Ohio.

I. *Normal Position and Movements of the Unimpregnated Uterus.*

II. *Impotency in Women.* By ELY VAN DE WARKER, M.D., Syracuse, N.Y. New York: Wm. Wood & Co., 1878.

Case of Obliteration of Vena Cava Inferior, with great Stenosis of Orifices of Hepatic Veins. By WILLIAM OSLER, M.D., M.R C.P., Professor of the Institutes of Medicine in McGill University, Montreal. (From the Journal of Anatomy and Physiology, Vol. XIII.

Ophthalmic Out Patient Practice. By CHARLES HIGGINS, F.R.C.S. Lindsay & Blakiston, Philadelphia; 1879.

This is a handy-book of one hundred and sixteen pages, in which are concisely given the main points in the diagnosis and treatment of optical defects and ordinary eye troubles. It will prove useful to advanced students and, mayhap, to some practitioners.

Elementary Anatomy, Physiology, and Hygiene, for the use of Schools and Families. By EDWARD PLAYTER, M.D., Editor of the *Sanitary Journal.* Toronto: Hart & Rawlinson, 1879.

Just as we are going to press we have received a copy of Dr. Playter's work, and shall have pleasure in referring to it in our August issue. It arrived too late for us to attempt to do it justice in this number.

Hearing, and How to Keep it. By CHARLES H. BURNETT, M.D., Philadelphia.

This is one of the series of American Health Primers (edited by W. W. Keen, M.D.), being issued by Lindsay & Blakiston, Philadelphia. Dr. Burnett, already widely known as the author of a standard work on the ear, has condensed into this small volume a great deal of information for the benefit of the laity. He describes the structure of the ear, and the physics and physiology of sound and hearing; the chief diseases and injuries of the ear, and the avoidance of their improper treatment; and also the general hygiene of the ear, including the education of the partially deaf and deaf-mutes. The book is replete with facts which ought to be widely known,—facts, the importance of which is not yet sufficiently appreciated by the profession itself.

The Diseases of Live Stock, and their most Efficient Remedies, including horses, cattle, sheep, and swine. By LLOYD V. TELLOR, M.D., 1879. Philadelphia: D. G. Brinton.

Having "growed" on a farm ourselves, we have always taken a lively interest in the horse; and having practised for some years in the country where veterinary surgeons were scarce, we often felt the want of some plain, reliable work on the diseases of live stock, free from the technicalities and poetry which characterize some of the works on this subject. Dr. Tellor's book appears to be just the kind of work we required, and we only wish it had appeared twenty-five years ago. It is sufficiently scientific to make it interesting to the ordinary physician, and yet plain enough to bring it within the comprehension of any intelligent, well-educated farmer. As a rule, we disapprove of popular works on medicine, both in regard to diseases of the human family and those of the lower animals, but now and then we come across a book in both departments which constitutes an exception, and we think Dr. Tellor's work on the diseases of live stock, constitutes a notable example of a work which can be safely recommended to the enterprising stock-owner, not only in sections unsupplied with good veterinary surgeons, but even in localities where they reside.

Chemistry: General, Medical, and Pharmaceutical. JOHN ATTFIELD, M.A., Ph. D. &c., 1879. Philadelphia: Henry C. Lea; Toronto: Hart & Rawlinson.

It is with a very sincere feeling of pleasure that we arise from the perusal of this work on Chemistry. Every page abounds in practical hints, and clear explanations of the manipulation of the various tests and reagents. The tables for the detection of bases and alkaloids, are well worthy of particular attention. The list of fats, oils, and resins, is rather an enumeration than a chemical account. But even this is interspersed with bits of practical information, which are useful and interesting.

The author's account of the Atomic Theory and the quantivalence of the elements and the general principles of Chemical Philosophy, on pages 36-58, is the clearest and most concise we have had the pleasure of reading. It is short, but during the progress of the work reference is continually made to it.

The section on quantitative analysis, both volumetric and gravimetric, contains much useful information in a very limited space. The various operations are plentifully illustrated by examples. Throughout the work there are

numerous examination questions, which cannot fail to be useful to the student in many ways.

We can heartily recommend the work to medical students and all others desirous of pursuing this branch of science, feeling sure that the real merit of the work will more than counterbalance what we cannot avoid considering its faulty arrangement, we had almost said lack of arrangement. The copious index will, in a great measure, make amends for this peculiarity.

Hints in the Obstetric Procedure. By WILLIAM B. ATKINSON, A.M., M.D. Physician to the department of obstetrics and diseases of Women, Howard Hospital, Philadelphia; Lecturer on Diseases of Children, Jefferson Medical College. Philadelphia: D. G. Brinton.

There is a fear in the minds of some that, in the present age, the science of the various departments of medicine is cultivated at the expense of the art; but we feel certain that such a danger does not exist on this continent, as American and Canadian teachers are eminently practical, and a large proportion of our practitioners are quite innocent of any great depth of scientific knowledge.

Dr. Atkinson fully appreciates the vast importance of the obstetric art in both its immediate and remote effects on mothers and children, as well as the reputation of the physician, and, in this interesting little work, gives valuable hints, which are intended to guide us in the management of women before, during, and after the termination of labour. He speaks highly of the efficiency of chloral in the treatment of false pains, inefficient pains, slow dilatation of the os, rigidity of the perineum, and puerperal convulsions; advises great caution in the use of ergot; gives a good chapter on the use of the forceps; describes the proper methods of expelling the placenta, giving prominence to Crede's method; gives treatment of after-pains, hæmorrhages, puerperal convulsions, sore nipples, &c. He gives excellent instructions as to the proper nourishment for a woman after her accouchement, as well as the correct nourishment of the child under various circumstances, and concludes with general directions respecting the management of the infant, and several of the accidents peculiar to infancy.

The book contains nothing original; but it is pleasantly written—the printing is exceptionally good; and the advanced student, or active obstetrician, can hardly fail to enjoy the short time which is required for its perusal.

A Manual for the Practice of Surgery. By THOMAS BRYANT, F.R.C.S. 2nd American, from the 3rd revised and enlarged London edition. Philadelphia: Henry C. Lea; Toronto: Hart & Rawlinson. pp. 962.

This work, by the well known Surgeon to Guy's Hospital, so severely criticised in its first edition, not so much as an unsound exponent of the Science and Art of Surgery, as for the inelegancies and inaccuracies of its literary composition, has been greatly improved. Its faults were doubtless more owing to carelessness than want of knowledge, for in this edition the author has shown that if not a graceful, he is in the main a correct writer, and the book if not as pleasant reading as some other standard works on surgery, is still an excellent one, either for reference or study. While not fearing to take an independent position on any point where surgeons differ, he always gives the other side of the question, and quotes fairly the eminent American and Continental authorities. The book ought scarcely to be called a manual, for it is one of the most complete and extensive in its contents that we have seen. The specialties have been written by specialists, and dealt with in a very thorough manner. The chapter on the Eye is by Mr. Charles Higgens; that on the Ear by Mr. Laidlaw Purves. A very complete chapter for a work on General Surgery is that on Dental Surgery, by Mr. Henry Moon. Dr. Moxon, whose name is a sufficient index of the character of the article, writes on the Pathology of Morbid Growths. The illustrations are numerous and good: we are especially pleased with those of Dr. Moxon, as they resemble so nearly what we have ourselves observed in the histology of tumours. We are glad to see so many new illustrations, for though not at all advocating orginality in this respect at the expense of accuracy of delineation, still, when new illustrations are good, there is a pleasure in variety. The arrangement of the subjects is somewhat different from that usually adopted, and is in our opinion inferior, but this is a matter of taste and by no means mars the valuable work of one of the first surgeons of the day.

Diseases of Infancy and Childhood. By J. Lewis Smith, M.D., New York, 1879. Fourth Edition, thoroughly revised, with illustrations. Philadelphia: Henry C. Lea; Toronto: Hart & Rawlinson.

When a work has reached the fourth edition, in this age of the world, very little need be said in its general commendation.

Dr. Smith's work on Disease of Infancy and Childhood is so well known, and so highly appreciated by the profession in its earlier editions, that all we need do is to call attention to its reappearance in revised and improved form.

It has been for several years the standing work on the diseases of which it treats, and this new edition embodies all the improvements in pathology and therapeutics which have become established since the publication of its predecessors. We are glad to see the author lay so much stress on the necessity for making medicine for children as palatable as possible; but when he comes to prescribe carbonate of ammonia, senega, and digitalis, in the same mixture as he does in bronchitis, we fear he does not succeed very well in carrying out his own precepts. Nevertheless, we do not condemn his practice, for the prescription is an invaluable one in certain cases, and can hardly be dispensed with for others more pleasant.

In speaking of the different forms of stomatitis, he appears to attach more value to the local treatment than to the constitutional, although he does say in reference to the ulcerated form, that "tonics are generally required."

In our experience, mild tonics and alternatives are of far more value than local remedies; and among the best we have found, chlorate of potash, (which he only uses locally,) ammoniocitrate of iron, and syrup of the iodide of iron, where the patient is not too feverish.

He appears to be a strong believer in the power of maternal impressions to produce marks and deformities in the child in utero, and although he gives a large number of authorities, both American and European, to sustain his proposition, we do not yet feel constrained to accept it as proven.

There is, however, very little in the book to which exception can be taken, while it must be regarded as the very best work on the diseases of children, either for the student or practitioner before the profession.

Potts' Disease: Its Pathology and Mechanical Treatment, with Remarks on Rotary Lateral Curvature. By Newton M. Shaffer, M.D. New York: G. P. Putnam's Sons, 182 Fifth Avenue.

This handsome little *brochure*, of some eighty pages, is composed of two admirable essays,—the one devoted to the consideration of the pathology, and the other to that of the therapeutics of Potts' disease, or, as the author prefers to term it, chronic spondylitis. A few brief remarks upon rotary lateral curvature are incidentally intercalated, the sum and substance of which is the establishment of the opinion that this form of spinal affection "has a specific pathological cause—not merely a mechanical etiology." The author regards the muscular contractions found as merely a reflex condition, or dependent upon some central lesion. The section devoted to the pathology of Potts' disease forms a striking contrast to the meagre account usually to be found in all general and most special treatises on spinal affections. In it, we are pleased to find that the author attributes to the constitutional condition a just measure of responsibility in the etiology of the affection. This is the more necessary at the present time, as, under the teaching of Sayre, pernicious in this respect, especially are we apt to lose sight of the influence of diathesis, and accord too great an influence to the effects of traumatism. The section upon treatment, by far the larger one, points out the fallacies and inefficiency of the various methods usually employed, and also the important fact that, the disease being constitutional, mechanical means alone cannot be relied upon exclusively for its cure. The plaster-of-Paris jacket, and the hyperbolical pretensions of some of its over-zealous advocates, is submitted to a very searching and just criticism. For therapeutical purposes the author divides the spinal column into three regions: the lower, including all that portion below the seventh dorsal vertebra; the middle, that between the first and seventh dorsal, inclusive of both; and the upper, all above the first dorsal. The treatment depends upon which of these regions the curvature may be in, and the middle region is found to be the most difficult to treat. For an account of the author's method we must refer our readers to the book itself, which cannot fail to thoroughly repay even the busiest practitioner for its careful perusal.

Handbook of Diagnosis and Treatment of Diseases of the Throat and Nasal Cavities. By CARL SEILER, M.D. Philadelphia: Henry C. Lea; Toronto: Hart & Rawlinson. 1879.

The chief *raison dêtre* of this little book seems to be that it is a "Handbook," a "ready book of reference on the subjects of which it treats . . . All purely theoretical considerations, and several affections which are classed among systemic diseases, and merely exhibit severe laryngeal symptoms, such as scarlet fever and diphtheria, have been omitted." In other respects it is very similar to the larger work of Dr. J. S. Cohen, whom the author duly thanks for his aid and some illustrations. Under the head of Laryngitis Phthisica is an observation worthy of note: "The most characteristic peculiarity of laryngitis phthisica is an abnormal pyriform swelling of the arytenoid cartilage; this is not mentioned in any of the books on the subject, and it is frequently seen in the laryngeal mirror, before a physical examination, reveals lung implication. The arytenoid cartilages appear very large and rounded at their inner surfaces, tapering gradually toward the side of the larynx until they are lost in the ary-epiglottic folds, their apices entirely disappearing. Often only one of the cartilages is thus tumefied, and it is then generally found that the lung in the same side is affected, while the other lung is still healthy." By using the term "laryngitis phthisica," and not "phthisis laryngea," our author seems to support Cohen, who "discards altogether the notion of any distinct disease to be called laryngeal phthisis. It is altogether doubtful if ever a case existed in which tuberculous disease was confined to the laryngeal structures." Though he does not express himself specially on the point, he differs from Cohen, however, inasmuch as "In the advanced stages of tuberculosis we find (as a usual thing) tubercular deposits in the mucous membrane of the larynx." Whereas Cohen says "tuberculous matter in the larynx and trachea does not often occur." But on this point Cohen is somewhat self-contradictory. The chapters on Pharyngitis, pages 76-91, are excellent—*multum in parvo.* On page 77, bromide of potassium would be better than "bromide of potash." The remarks on "Speakers' Sore-Throat," are well worthy of perusal. In the treatment of Coryza, we find recommended, with the addition of a little sodæ bicarb, that influenza snuff of bismuth, acacia, and morphia, which has been so much used, and with such good results, the prescription for which originated with Dr. Ferrier, of London, though our author does not refer to him. The little "Handbook" will be found a very convenient one, especially to those who may not wish to spend the time necessary for the larger works of other authors.

The Principles and Practice of Gynœcology. By THOS. ADDIS EMMETT, M.D., Surgeon to the Woman's Hospital of the State of New York. Henry C. Lea, Philadelphia, 1879; Toronto: Hart & Rawlinson.

The announcement of a work on Gynœcology by Dr. Emmett has for some time kept the medical world in a feverish state of expectancy; for all who had the pleasure of knowing the author, and his opportunities of observation in his specialty, were satisfied that a work of no ordinary merit would be forthcoming.

Dr. Emmett's work is entirely original, both in theory, conception, and execution. Some of his opinions are rather severely criticized, but although in some respects he may be not altogether orthodox, yet in many others his views are correct, and will be ultimately accepted. He is a bold and clear thinker, and does not hesitate to express his views with that force and candour begotten of clear conviction.

Chapter I., on "the relations of climate, education, and social conditions to development," is well worth the careful attention of all who have the care of girls during their approach to puberty. If his views were more generally entertained, and allowed to direct the habits and education of females during that critical period, there would be fewer invalid wives and more mothers, and, consequently, more happy homes throughout the land.

The peculiar forcing process to which females are exposed during the period of education has much to do with the dysmenorrhœas, menorrhagias, displacements, sterilities, and invalidism met with in after life, and we wish that Dr. Emmett's views could be more widely known.

Chapter VI., on "principles of general treatment," gives a timely warning against the danger of ordering stimulants and narcotics for persons suffering from chronic uterine disease, and also the evil of establishing a habit of invalidism by protracted confinement in bed.

Chapter VII., on "local treatment," speaks very favourably of the use of large vaginal injections of hot water for the relief of chronic inflammation or congestion of the uterus.

In Chapter VIII., he shows that in treating prolapses of the uterus, as much suffering results from supporting the uterus above the health line, as from allowing it to remain below it.

His pathology does not in all cases accord with that generally accepted, but who can say that he is not right?

He denies the existence of true elongation of the cervix uteri unconnected with laceration of the cervix, and says there is no mucous membrane in the uterine cavity above the internal os, and no sphincter to the female bladder, but we have not room to specify farther, and must refer our readers to the work itself for the true enunciation of the author's opinions. It contains a large number of statistics derived from his own experience in private practice and his service at the Woman's Hospital, compiled by himself, and worked out with great care. The illustrations are very good, and, with few exceptions, original.

Dr. Emmett is probably the most successful living operator in lesions of the female bladder, perineum, and sphincter ani, and the chapters on these subjects will therefore be read with peculiar interest and profit.

Some persons have taken exception to the arrangement of subjects, which, although not so easy of reference for students as the more tabular work of Thomas, will, nevertheless, be found quite practicable for the practitioner.

Taking it altogether, we heartily recommend it to the profession as a thoroughly practical, original, and safe guide in the difficult and often troublesome class of diseases of women.

Health and How to Promote it. By Richard McSherry, M.D. New York: D. Appleton & Co., 1879.

This is a racy little book of 180 pages, full of good advice and important suggestions, and written in a free and easy style, which crops out in continued humour and crispness, by which the advice is seasoned, and which render the reading of the book a pleasant pastime to all, whether professionals or non-professionals.

Part I. is divided into five chapters. The title of Chapter I.—"Hygiene the Better Part of Medicine"—we would commend to those practitioners who affect to believe that "Sanitary *Science*" is a misnomer, and that the subject is not worthy any special attention, and needs only a little common sense. If such be the case, this last commodity is sometimes wofully wanting. In this chapter the author takes us over invigorating mountain slopes, across the rolling prairie, and down the banks of rippling streams—alas! that it is all in imagination. He thus excites our admiration, with the object, we presume, of showing how, when Mahomet cannot go to the mountain (if we may reverse the proverb, and give it a literal application), the mountain may be brought to Mahomet, so far as its hygienic advantages are concerned.

Of the remaining four chapters, each is devoted to the consideration of one of the four scores of years into which he divides the life of man. After giving all practical and practicable hints as to the management and care of the infant, the rest of this part is mainly devoted to the consideration of mental and moral training, education, and habits of life. Our author points out that girls are more susceptible to the bad results of hot-house learning than boys, because they will take more of it, and are more docile and desirous of praise, and quicker. On one point we differ from him: that at fourteen, boys and girls should devote themselves to the special work applicable to the future career. That is too soon to be "sufficiently educated to enter upon the special course," in Canada, at least, whatever it may be as far south as Maryland. We have more sympathy with his attack on ill-balanced education, both in boys and girls,—the ostentation of *ologies* and *osophies*, without the formulation of a fair English education; young women dis-

coursing learnedly of logarithms and unable to solve the problem of a little flannel night gown, or a cup of drinkable beef tea, when the time comes for them. We hold that, so far as ever circumstances will permit, the higher education should be gained, but not to the neglecting of fundamental and practical principles. The advice to young men and women on good habits, regularity, and the avoidance of the opposite, is good. The cultivation of mildness, equanimity, integrity, and avoidance of a haste to grow rapidly rich, with its overwork and wear and tear, are inculcated. Then comes a gradual following up to the *Decline of Man*, which is beautifully and touchingly portrayed. "Our elderly man must grow old gracefully," and, to this end, advice, subjective and objective, is given.

The first chapter of Part II. is devoted to "Temperaments, Idiosyncracies, Inheritance, &c." Chapter II. takes up, in a superficial and popular way, "the Air we Breathe, Sewers and Cesspools, Malaria, Animal Emanations." These are touched very lightly—the author having told us in his preface that he leaves such matters to be more fully taken up by others. He gives under malaria some interesting investigations as to the existence of malarial fever in the Rocky Mountains, far away from marsh or swamp. Analysis has shown a large amount of organic matter in the water, wafted by winds and other forces into the air, then brought down in snow, and then slowly melting into water supply. This reminds us that the late Dr. Parker ascribed similar phenomena to disintegration of granitic rock formations. *In re* water: "No pump-water should even be considered potable in cities." This is a good general rule. On the subject of "water-filters" our author fails to give a warning note. He gives false security when he says, "good water-filters should be brought into general use in town-houses," without adding that filters are of little use so far as the removal of *dissolved* organic impurity goes; and that while they meet *suspended* matters, and so do some good, they must be frequently renewed, or else become sources of increased impurity. The remainder of the book is devoted to "Clothing, Occupation, Work and Rest, Foods, and manners of taking them, Alcohol, and Tobacco."

We are glad to see throughout evidence of the truth of the author's remarks in his "Envoi," that "the writer has a strong faith in the coincidence of good health and good morals;" and that in connection with the latter he recognizes a higher principle of action and higher relations than those which would belong to a mere link in the chain of evolution.

On Diseases of the Abdomen. By S. O. Habershon, M.D., London. Second American from Third English Edition. H. C. Lea, Philadelphia; Toronto: Hart & Rawlinson.

The title upon the back of this American edition, "Diseases of the Alimentary Canal," is much more appropriate, as will be seen as we proceed, than the one which heads this notice and by which the book is better known. The introductory chapter treats, as in the previous edition, of digestion and indigestion, the effects of the systemic condition upon treatment, and the antagonism of disease. Chapters two and three are entirely new, and deal with the affections of the tongue, mouth, and pharynx. Both are excellent chapters. Chapter four, on the œsophagus, is particularly good. The notably frequent concurrence of pneumonia, with cancer of the œsophagus is especially insisted upon; and the greater frequency of the occurrence of the œsophageal cancer in males, as stated by Grisp, is supported by the figures here adduced (59 in 85) in opposition to Richardson's opinion. To chapter five, on organic diseases of the stomach, a section on dilatation has been added; and Pavy's suggestion with reference to the effect of the alkaline blood in the capillaries in preventing solution of the walls *intra vitam* is now introduced. In the section on atrophy, we miss any mention of the association of this condition of the pyloric end with cancer, especially of the uterus and breast, as pointed out by Fenwick. Fatty degeneration of the walls as productive of dilatation of stomach and intestines, lately referred to by Furneaux Jordan, receives no notice. We are pleased to find Kussmaul's method of washing out the stomach in dilatation recommended, as also Furstner's application of electricity. The

connection of superficial ulceration of the mucous membrane with pulmonary and cardiac disease is well brought out; and the occurrence of this lesion with Addison's disease also is sought to be explained through the medium of the branch of pneumogastric to the renal sympathetic. In the etiology of ulcer, the author adopts the view of a deteriorated nervous supply in preference to the embolic theory of Virchow or the ecchymotic and necrotic theory of Rokitansky. For the chronic ulcer he adopts the theory, which is probably best founded, of an inflammatory origin. In chapter sixth, on functional disease of stomach, we regret to find no mention of the value of lactopeptine or extract of malt. The observance of the strictest dietetic and hygienic rules is very vigourously insisted upon as a *sine quâ non* in successful treatment. In this chapter, a fact not sufficiently recognized is well brought out, viz., that in infants severe collapse sometimes ensues upon the coagulation of the milk in the stomach, especially if a portion of coagulum be arrested in the pyloric strait. The diagnostic value of pain and vomiting in gastric disease is very thoroughly considered and clearly put. Chapter seven treats of the duodenum, and makes the *amende honourable* to Dr. Bright, the value of the presence of fat in the stools as indicative of pancreatic affection being here recognized, although called in question in the former edition. Muco enteritis and enteritis are considered in chapter eight, and a very instructive section on the pathological changes in the former is introduced. To chapter nine, on strumous and tubercular disease of the intestine, an excellent account of lardaceous disease fully up to date is appended in this edition. No mention is however made of the alkaline treatment, which Dickinson and others have spoken so favourably of. Chapter ten relates to the cœcum and appendix. Chapter eleven treats of diarrhœa. Warm baths are recommended for children, but no reference is made to Comegy's treatment of summer diarrhœa by cold bathing, or to the copious cold enemata, which have proved so effective in America. As to choleraic diarrhœa, the treatment by chloral, lately so highly lauded in India, receives no mention. Chap. twelve treats of dysentery and catarrh of the colon; chapter thirteeen, of typhoid disease of the intestine; fourteen, of colic; fifteen, of constipation—all admirable chapters. In the treatment of organic obstruction, (sixteen,) we do not object to the high laudation which opium has received at our author's hands; but we think it should have stated in addition that by its means the symptoms may be so obscured that the the opportunity for a possibly successful opera- may be permitted to slip by. The use of belladonna, too, should have received some notice. The value of cold, as in the application of ice to the abdomen, is strongly urged. Suppuration of the abdominal parietes, and perforation of the intestine from without, are fully considered in chapter seventeen. The book contains a very good chapter (eighteen) on intestinal worms; but no allusion is made to the fact recently established in France that the tænia *may* go through the successive phases of development in the same species of animal. In the chapter on peritonitis (nineteen) a few remarks on loose bodies in the peritoneum are introduced, but we nowhere find mention of the presence of gas in the intact sac, as pointed out in several instances, we think, by Mr. Rickman Godlee and others. Two new chapters —one on ascites and the other on abdominal tumours—complete the work. We are pleased to find that the author recommends compression by the elastic or other bandage in asthenic ascites, as advocated by Dr. Stephen Mackenzie. The value of a milk diet is not alluded to, but the resin of copaiba is highly spoken of. Southey's capillary cannulæ receive favourable mention. In conclusion, we most heartly commend the book to all. Replete with instances, practical suggestions, and rational and sound doctrine, it cannot fail to realize the hope expressed by the author in his preface "that it will be found helpful in clinical study as well as in the treatment of disease." The value of the text is enhanced by drawings and by the records of 192 illustrative cases. Of the general style and appearance of the work it would be superfluous to add a word since it issues from the establishment of Henry C. Lea, of Philadelphia.

For Night Sweats—Chloral hydrate is recommended.

Meetings of Medical Societies.

HAMILTON MEDICAL AND SURGICAL SOCIETY.

The regular monthly meeting of the above society was held at the Royal Hotel, June 3rd. The President, Dr. George Mackelkan, in the chair. The paper for the evening, was one by the secretary, Dr. Woolverton, on "A case of Poisoning by Paris Green." The subject of the case, a German woman, aged sixty-five, who, weary of the "struggle for existence" of her family, and pecuniary burdens, secretly took an enormous quantity of the above poison, estimated to be at least a quarter of a pound. It is is supposed it was taken about 3 p.m., and she died about 11.15 of the same day. The family never suspected that she had taken the poison and, at her own urgent request, oft-repeated, no medical man was sent for, and it was not till about 10 p.m., when it became self-evident that she was sinking, that they sent for any medical assistance. She was then in a state of complete collapse; cold extremities; a fading pulse, and laboured breathing. Poisoning was not suspected till next day, when a fuller history of the symptoms was gained. She never complained of any pain, but wished to be left alone. She vomited green matter, which they took to be bile, and purged some watery stools, but as far as can be learned to no great extent. The great amount of poison taken seems to have produced a state of collapse, which prevented or obscured the usual violent symptoms of an irritant poison; and as she lived only about eight hours after it was taken, there was not full time for their development. The œsophagus and stomach were presented for inspection, and showed the marked effects of an irritant poison—the dependent part of the stomach being in an almost sloughing condition, of a slaty hue, softened. There was nearly a cup full of the green sediment mixed with mucus in the stomach, and the green substance was traced as far down as the descending colon. The lungs were markedly and uniformly emphysematous, filling the chest cavity, much pigmented, otherwise healthy. The heart was sufficiently healthy, presenting some atheromatous changes; the valves all competent. The kidneys shewed traces of old standing disease. The membranes of the brain were congested with patches of lymph deposits. The subarachnoid spaces were filled with a serous fluid. The substance of the brain healthy, apparently; the liver firm, and somewhat enlarged. The usual tests for arsenic gave abundant evidence of its presence. The case is interesting from the amount of poison taken, the determination of the suicide as shown by her being able to keep her secret till the last; also from the absence of marked symptoms. It was thought by the medical gentleman in attendance that she was dying from the formation of a cardiac clot, but the cause of its production was not very evident.

Meeting of the Newcastle and Trent Association.—Want of space compels us to hold over the report of this Meeting. It shall appear next month.

APPOINTMENTS.

Allan Noxon, of the Village of Milford, Esquire, M.D., to be an Associate Coroner, in and for the County of Prince Edward.

James Henry Lowe, of the Village of Haliburton, M.D., to be an Associate Coroner, in and for the Provisional County of Haliburton.

Charles Battersby, of the village of Port Dover, Esquire, M.D., to be an Associate Coroner in and for the County of Norfolk.

Retention of Urine—Thirty-five Punctures of the Bladder—Cure.—In the March No. of *La And. Méd.* we find a case of this kind reported taken from the *Rev. Méd. de Tolosa.* The patient was a man 50 years of age, suffering from a hæmorrhoidal congestion, and catheterism proved impossible. No. 2 needle of the aspirator was employed, and 2½ litres of urine were drawn off. The next morning the second puncture was made, and in the evening the third. From the 27th of July to the 12th of August two punctures daily were made. Thirty-five punctures were thus made in a space limited to two or three centimetres above the pubes. After the third aspiration a little urine was passed by the urethra, but not until the thirty-fifth was the natural function of the urethra restored.

Miscellaneous.

Ague.—Rokitansky has reported a case of quartan ague cured by hypodermic injections of a 2 per ct. solution of pilocarpine. 16 centi grammes were injected two hours before the attack, which was shorter and slighter than it had ever been before.

College of Physicians and Surgeons, Ontario.—Examiners for 1880 :—Midwifery, Dr. Thorburn; Medicine, Dr. Robertson ; Anatomy, Dr. Sullivan ; Physiology, Dr. Poole ; Materia Medica, Dr. Stevenson ; Surgery, Dr. Mallock ; Medical Jurisprudence, Dr. C. T. Campbell ; Chemistry, Dr. D. Clark ; Homœpathic Examiner, Dr. Adams, Toronto.

Trinity College—Special Convocation for Conferring Degrees in Medicine.—A special convocation was held at Trinity College on Saturday afternoon,—the Chancellor, Hon. G. W. Allan, presiding, for the purpose of conferring the Degrees and Certificate of Honour on the students from Trinity Medical School, that have been successful in the recent examinations in Medicine. The following is a list of the recipients :—*Medals*—Gold Medal, R. P. Mills ; Silver Medal, J. A. McKinuon. *Certificates of Honour*—W. Duck, J. B.W.Caughlin, J. J. McIlhargey, T. A. Kidd, C. O'Gorman, W. Sharpe, Eyre M. Thuressen, J. D. Andersen, J. O'Rielly, E. Prouse, A. C. Geikie, R. M. Eccles, D. Lowry, A. C. Graham. *M.D.*—J. D. Bonner, Kenneth Henderson, R. A. Ross, A. M. Lynd, W. H. Doupe, W. A. Dafoe.

Case of Opium Poisoning Cured by Atropia Hypodermically.—On the 13th of February, 1879, a case was admitted into Leeds Infirmary. In the absence of the house-physician, the house-surgeon took charge of the patient. He has forwarded me the following notes. A man aged 35 was admitted at 9 p.m. who was said to have taken ʒvi of laudanum one hour previously. He was able to answer questions, his pupils were contracted, he was irritable and somewhat excited, saying he wished he had taken twice as much. He refused to have the stomach-pump applied. A scruple of sulphate of zinc was given. At 9.40 there was no vomiting, and the patient was getting worse ; the stomach-pump was resorted to, and about twelve ounces of brownish-coloured fluid, smelling of opium, was withdrawn, and a pint of strong coffee injected. At 11.20 the patient was worse, and could be roused only with great difficulty. Pulse 120 ; respirations 15 per minute. The pupils were reduced to a pin's point ; the patient had been walked about continuously. One-tenth of a grain of atropia was then administered subcutaneously ; condition slightly improved till 12.20 a.m., when he became utterly unconscious and incapable of being roused by the most violent means, including faradaism, etc., etc. ; pupils firmly contracted ; pulse feeble and rapid ; respiration down to 12. A quarter of a grain of atropia was then injected subcutaneously. At 12.40 a.m., the patient was somewhat better ; respiration 18 ; pulse firmer and 120 per minute. The pupils were dilated ; there was no return of consciousness, the extremities were cold, but the sleep was more natural. At 1.10 a.m., the respirations suddenly sank to 12, but rose again to 20 after artificial respiration had been carried on for ten minutes ; pulse good ; the patient continued to sleep to 8 a.m., when he awoke, was able to answer questions and to take food, and to the present (16th, 6 p.m.,) has continued to improve. This case illustrates the toxic effect of opium upon the respiratory centres, and also how the paralysis so induced can be met and antagonized by the use of atropine. The only criticism I have to make is that if a quarter of a grain of atropia had been injected at the very first, the serious symptoms which appeared might have been kept off. The case is very encouraging as to the future treatment of opium-poisoning by the subcutaneous injection of atropine.—*J. Milner Fothergill, in Phil. Med. Times.*

Births, Marriages, and Deaths.

MARRIAGES.

At Wyoming, on May 28th, Dr. N. H. Beemer, of the London Asylum for the Insane, to Mary A. W., eldest daughter of Mr. Alexander Laing.

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(See Transactions of American Medical Association, for 1876, page 176.)

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THE

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TORONTO, AUGUST, 1879.

Selections: Medicine.

A NEGLECTED PROXIMATE CAUSE OF DYSPEPSIA, WITH A NEW DIVISION OF THE DISEASE.

BY ARTHUR LEARED, M.D., F.R.C.P., M.R.I.A.

All cases of true dyspepsia may be referred to two proximate causes. Instead, then, of the classification into atonic dyspepsia, which is not used in any precise sense, and gastritis or gastric catarrh, neither of which terms is applicable to all the cases they are often made to include, I propose the following divisions :—

Dyspepsia from impaired motion;

Dyspepsia from defects of secretion.

We have nothing at present to do with the latter, beyond what concerns the differential diagnosis between the two classes.

Avoiding minor details, the leading symptoms of dyspepsia, namely, uneasiness in the stomach after meals, described variously as a sense of weight, fulness, or pressure, flatulence, pain, and constipation, are, for sake of comparison, arranged in parallel columns, and each is separately considered under the two above named heads.

Impaired Motion.	Defects of Secretion.
Uneasines after Meals.—A constant symptom; generally soon replaced by the sense of tension accompanying flatulency.	*Uneasiness after Meals.*—Not unfrequent, but commonly soon merged in actual pain.
Flatulence.—This is the most characteristic symptom of impaired motion.	*Flatulence.*—Comparatively unfrequent. Some of the worst cases, in which pain after food and other symptoms are particularly severe, are entirely free from flatus. The tendency is to lactic, butyric, and, perhaps, other forms of fermentation, in which gases are not evolved.
Gastric Pain.—Unfrequent; but occurs occasionally as a result of flatulence, and is peculiar in kind.	*Gastric Pain.*—Variously described as sharp, shooting, dull, or dragging, is the most characteristic symptom of defective secretion of gastric juice.
Constipation.—Almost always a marked symptom.	*Constipation.*—Not generally present; and the bowels are in many cases relaxed.

Although the great importance of gastric peristalsis has not been hitherto recognized as a cause of dyspepsia, due weight has long been attached to peristalsis of the intestines. Diminished intestinal peristalsis is a recognized cause of constipation, for which remedies are daily prescribed. It is precisely in such cases of dyspepsia that constipation might be theoretically expected, from the probable existence of a common condition throughout the intestinal tube. In the case of imperfect secretion, on the other hand, digestion is not merely sluggish, but the gastric juice being unable to effect the necessary changes in the aliment, the ill prepared chyme is unsuited for contact with the intestines. The consequent irritation not only prevents constipation, but sometimes causes diarrhœa.

In some cases, the symptoms which accompany impaired gastric movements are of so general a nature, that the question arises whether the gastric affection may not be incidental to a state of relaxation and want of power in the whole system. The circulation is slow and weak, indicating a relaxation of the vaso-motor nerves, and feebleness of the heart. But the organ is easily excited, and its action is often intermittent. For the latter, there are two causes, namely, mechanical pressure of the

distended stomach on the diaphragm, and irritation reflected from the stomach through the pneumogastric nerves to the heart. Sometimes this irritation affects the lungs, when dyspnœa and cough are produced. The tongue, large and flabby, is deeply indented by the teeth, while the muscular structures of the throat, like those of the stomach, are so relaxed, that the part is often a source of constant trouble. There is a general sluggishness of the whole man. The tendency to sleep after meals is, in some cases, irresistible. The mind participates in the torpor of the body, and yet, like the circulation, is subject to be morbidly excited. It is in this form of dyspepsia that the pains of indecision, depression, and apprehensiveness, are most fully experienced. Such is an outline of the symptoms caused by, or perhaps sometimes only coincident with, impaired gastric peristalsis. Mixed cases, in which the effects of defective secretion are combined with those of impaired movements, are to be met with. But, in general, the affections are distinct.

The distinction between their causes is also well marked. The causes of impaired peristalsis may be summed up as those by which nervous energy in general is impaired. Such causes are, hard study, mental strain, depressing passions, prolonged bodily fatigue—in a word, whatever uses up nerve-force in such a way as to leave an insufficient amount of it for an organ, the action of which, although intermittent, requires a large share.

But, in order to maintain its vigour, the stomach requires absolute rest at regular intervals, and, for this purpose, must be empty. When at rest, the organ hangs motionless and nearly perpendicular in the abdomen. The practice of eating too frequently or at irregular intervals is, therefore, a common cause of dyspepsia from impaired motion.

Tea-drinking is a very common cause of impaired gastric peristalis. This is mainly due to a specific effect on the nerves, and partly to the practice of taking the infusion as warm as possible, by which the tonicity of the muscular coat of the stomach is lowered.

The proximate cause of defective secretion is congestion and consequent gastritis. A primary affection of the vaso-motor centres is probably a frequent cause of congestion; but local irritation, such as from strong alcoholic drinks, hard indigestible food, and food taken in excess of the gastric juice secreted is the ordinary cause.

In the treatment of all forms of dyspepsia, attention to diet claims a prominent place. Articles known to be slow of digestion must be avoided, and a lessened amount of food must be taken only at proper times. But, as a rule, absolute strictness in diet is more necessary in dyspepsia from defective secretion than in that from impaired motion; for, as already said, in the latter affection, digestion is sluggish rather than imperfect. One dietetic rule is, however, of the greatest importance in the present case. The principal meal should be taken early in the day, before the nervous system has been exhausted either by mental or by bodily exertion. In some instances, the power of digestion seems to diminish in proportion as the day advances. A distinguished literary lady consulted me who had, by incessant brain-work, fallen into a state of great suffering from gastric oppression and flatulence after meals. At my suggestion, she dined early instead of late in the day. This change was beneficial, but was not effectual in affording relief. I then advised that she should eat meat at breakfast only, and that no writing should be done before the meal. This plan succeeded perfectly.

From its well-known power in causing muscular contraction, strychnia suggests itself as the remedy for impaired gastric peristalsis. It affords the most powerful means we possess of restoring the gastric functions. I may, perhaps, take some credit for having helped to make known its value. So long ago as 1869, I wrote: "Speaking from extensive experience, I know no single medicine of more value.... It acts by increasing the tone of the muscular coats of the stomach and intestines. When these coats are relaxed, gases are generated, mainly owing to retardation of the aliment in the cavities. No remedy has in my hands proved so permanently effective as strychnia against this inconvenience." (*Imperfect Digestion*, 1st ed., p. 186.) In 1864, the late Dr.

Brinton, following Chomel, condemned the use of strychnia in stomach-diseases as unnecessary and dangerous. (*Diseases of the Stomach*, p. 334.) But, notwithstanding the condemnation of these authorities, strychnia has held its place in these affections, because, although too often given without discrimination, it proves beneficial in many instances. The secret of its successful administration lies in the recognition of the cases. It is suited for cases characterized by the symptoms of impaired motion; namely, uneasiness, but not actual pain, after food, and flatulence. It is not suited for cases of impaired secretion, characterised by pain after food and little or no flatulency.

Some precautions are of course necessary, and more so because the patients are seldom under daily observation. A dose of one-twentieth of a grain should rarely be exceeded. It should never be given in pills, on account of the difficulty of exact subdivision in that form. The susceptibility of the alkaloid to precipitation by alkalies and some other substances must be kept in view. If so precipitated, the whole of the drug would, of course, be contained in the last dose in the bottle. For the rest, the pharmaceutist must be responsible. But, after having prescribed strcyhnia some thousand times, I never knew any harm to arise from its use.

It might be supposed that electricity would prove useful for lesions of peristalsis; but, after many trials of faradisation and a few of the direct current, I am compelled to say that I do not regard it as an useful agent in this affection.

It is sometimes desirable to check flatulence by some agent which hinders fermentation. Formerly, I prescribed carbolic acid for this purpose; but its unpleasant taste is a great drawback. Of late, I have used thymol with, I think, better results; and the taste is far less objectionable.

Many cases are met with in which the stomach is unable to expel flatus in consequence of temporary paralysis from over-distension. Various drugs given to promote contraction of the organ—carminatives as they are called—sometimes fail in their purpose. It is in such cases that charcoal proves useful. Charcoal possesses a remarkable power of absorbing gases; but this power, as I have elsewhere shown, is very much lessened by long keeping and by wetting. This led me to the plan of giving, in hermetically sealed gelatin capsules, charcoal prepared from vegetable ivory, which kind was proved by experiment to possess the best absorbing power. If in cases of obstinate gastric distension, three or four such charcoal-capsules be swallowed, a few cubic inches of carbonic acid gas will be speedily absorbed. Tension being now removed, the muscular coat of the stomach generally resumes its power, and flatus is freely expelled.* In a few obstinate cases, however, chiefly when the stomach-affection is secondary to diseases of the liver or kidneys, the muscular paralysis is so complete that, as happens in case of the over-distended *rumen* in cud-chewing animals, mechanical interference is the most effective mode of treatment. For this purpose, I have had made a small India-rubber tube (tube shown) two feet in length, having one extremity closed, and perforated like a drainage-tube to the distance of four inches from the end. Such a tube can be safely and easily introduced into the stomach, and will prove effectual in relieving the distended organ.

I am convinced that certain symptoms, described as a sinking sensation in the gastric region, craving for food soon after meals, etc., are generally to be attributed to hyperperistalsis or exaggerated movements of the stomach. But this constitutes a distinct disease, to be separately discussed. The same remark applies to dyspepsia of liquids and the flaccid state of the stomach which exists in that affection.—*Brit. Med. Journal.*

Atropia for Urticaria.—In three cases of severe and stubborn urticaria, after everything else had failed, Frænkel (*Berliner Klin. Wochenschrift*) found that the internal use of atropia succeeded in promptly allaying the annoying itching. It will not, however, prevent relapse.

* Perhaps the best proof of the utility of this charcoal so administered is to be found in the fact, that the capsules are manufactured on a very large scale, and are exported largely.

A CASE OF SPASTIC SPINAL PARALYSIS ENDING IN RECOVERY.

One of the many undetermined points connected with the disease described by Erb under the name of spastic spinal paralysis (tabes spasmodica, Charcot) relates to the prognosis. Erb believes recovery to be extremely rare, though less so than in other forms of chronic spinal paralysis. Charcot refused to believe in the possibility of recovery from the disease. Westphal has published one case in which complete recovery took place. In Dr. Kussmaul's Klinik at Strasbourg, Dr. Reinhard von der Velden observed the present case (*Berliner Klinische Wochenschrift*, September 23, 1878); it is distinguished from Westphal's by the acute onset of the disease, and the rapidity with which all the characteristic symptoms were developed.

E. P., aged 27, clerk, had a good family history, and had enjoyed good health, with the exception of a short indefinite illness at seven years of age. No traces of syphilitic infection could be discovered. Slight kypho-scoliosis was present, which, the patient said, dated from birth. Two days before admission, he attempted suicide by jumping into a river; after being rescued, he walked several miles home in his wet clothes, exposed to a wind, and went to bed. Next day he complained of pains in the abdomen, and gastric troubles.

On admission, on May 13th, the tongue was coated, and the abdomen somewhat hard and full. There were no other objective symptoms. He had no appetite. There was no constipation. Temperature, 100.9; pulse, 82; respiration, 14. Castor-oil was ordered.

May 14th. He had excessive perspiration during the night; no abdominal pain, but a feeling of pressure on the chest. There were no other physical signs, no fever.

17th. He had pains in the region of the bladder, and dragging pains in the testicles. His appetite was good; the alvine secretions were natural. He looked pale and anxious, and refused to get up.

18th. The patient was small and anæmic, with weak muscular development, but was moderately fat. He complained of a peculiar stiffness in the legs, which he first noticed the preceding evening. He had no pain, and slept well. No disturbance of circulation, respiration, or digestion were present. On being lifted out of bed he was unable to walk; he could hardly move one leg before the other, and could not flex either knee or ankle. Both legs were stiffly extended by a spastic contraction of all the muscles. A slight tremour was also observable in them. The spasms became more intense while the patient stood, and he was thrown more and more forward upon his toes. When supported on both sides and taken along the ward, he either let both his legs drag stiffly after him, or attempted by means of the pelvic muscles, to swing them round alternately.

On being replaced in bed, the muscles of both lower extremities were seen to be strongly contracted, and in a state of constant tremour; the latter, however, gradually passed off when the patient was left quiet and became warm in bed. All movements could be performed, but only very slowly. Passive movement of the limbs met with moderate resistance. After about half an hour the spasm also became less severe; movement was easier, but weakness was still evident. No pain was caused by pressure on the spine. There was no disturbance of sensation; neither trophic nor vasomotor symptoms could be discovered; the sphincters were unaffected; the intellect was clear; there was no vertigo nor inequality of the pupils. There was neither albumen nor sugar in the urine.

23rd. The patient stated that when he was warm in bed, his legs neither trembled nor were stiff, but that he could only lift them a very slight distance; he could not cross one over the other. The attacks of rigidity and tremour occurred two or three times daily, sometimes spontaneously, and sometimes in consequence of external causes. During a strong attack the patient would perspire freely, and afterwards feel quite exhausted. Strong pressure upon the crural nerve during an attack caused the muscular spasm to cease in the leg of the same side, but to become more powerful in the other. By dint of great exertion the patient was able very slowly to flex either of his legs during the period of spasm; as soon, however, as the leg and thigh were inclined to one another at an angle of about 45°, the muscular resistance of the movement sud-

denly ceased, and the heel was brought with considerable force against the nates. The whole phenomenon very much resembled the sudden closure of a pen-knife after the resistance of the back-spring has been overcome. The limb was now spasmodically fixed in the position of extreme flexion. The spasm could be at once relaxed by exerting pressure upon the crural nerve. If this were not done, and the patient were directed to extend the leg, he was able to do so slowly and with great exertion until it had slightly passed the right angle, when it was suddenly and violently brought into the position of extension.

The tendon-reflexes were greatly increased; sensation was diminished; electric contractility showed no qualitative abnormality, but was somewhat diminished in degree.

Until the middle of June the disease continued to progress; the lower limbs became paralyzed. Attacks of spasm and tremour occurred several times daily; occasionally they were spontaneous, but generally they were due to the legs being touched, or too cold; sometimes also to psychic impressions. The patient showed marked emotional disturbance, being sometimes very cheerful and happy, and at others melancholy, despairing, and excited. While in the latter condition, he attempted to divide his radial artery with a piece of broken glass, and twice stealthily obtained half a litre of brandy, which he drank neat. During the drunkenness which followed, he had the most violent spasmodic attacks.

In July the symptoms somewhat abated, and the patient could walk a little with two sticks. In the autumn, the attacks again became more violent; occasionally slight muscular tremour was observed in the arms, and once the speech was affected during an attack. At the beginning of the winter the patient was again confined to bed; the attacks were accompanied by burning pains in the knees, and formication in the legs. In January, 1878, he was again up for a time, but became worse towards the end of the month, and after lying in bed again for some weeks, slight atrophy of the muscles of the legs was noticed. During March and April the patient was usually able to get up, and only had occasional attacks; in the beginning of May he had his last attack; after that he daily improved; at the end of the month he could walk well with a stick, and only complained of some stiffness in his knees, and of being easily fatigued. On June 24th he was discharged completely cured, the only symptom remaining being some increase in the patella tendon-reflex.

Two days after his discharge he attempted suicide by drinking a solution containing morphia and ergotin. After the use of the stomach-pump he recovered, but had an attack of acute gastritis. He also had delirium tremens for eight days, brought on by excessive drinking after his discharge. He has since remained quite well.

The treatment of the case was chiefly symptomatic, and directed to diminish the increased reflex irritability. Bromide of potassium, extract of belladonna, warm baths, and galvanization over the spinal column, had absolutely no effect. The administration of morphia appeared to increase the number and intensity of the attacks. When the spasmodic attacks were at their worst, 30 to 60 grains of chloral, administered *per rectum*, proved useful.

From the middle of April the patient took chloride of gold and sodium, in doses of about one-third gr. (!) three times daily. Altogether, before his discharge, he had taken nearly 90 grains of the drug. The palliative effect of chloral seems to be established, and the fact of recovery having taken place during the administration of the double chloride of gold and sodium would justify a prolonged trial of this drug in future cases.

As to the pathological anatomy of the disease, it is clear that in this case there could have been no severe anatomical lesion in the nervous system, certainly no definite sclerosis in the lateral columns of the cord. The disease in the present case was developed in a man with an abnormal nervous constitution.

The prognosis does not seem to depend at all upon the mode of commencement of the disease, for in Westphal's case of recovery the affection commenced most gradually, while, in the present case, the essential symptoms of the disease were unmistakably developed within seven days of the severe wettings and cold,

which must undoubtedly be regarded as its immediate cause.

The author speaks of the peculiar appearances noticed during the efforts of the patient to flex and extend his legs while they were affected by muscular spasm, as the "pen-knife phenomenon" (Taschenmesserphänomen); its explanation is difficult, but the cessation of the spasm when the limb reaches a certain position may be due to mechanical pressure or tension being exercised in that position upon some nerve. The fact that the spasm could always be checked by pressing upon the crural nerve below Poupart's ligament, favours this view.—*London Med. Record.*

CHRONIC ARTICULAR RHEUMATISM AND RHEUMATOID ARTHRITIS.

A lecture delivered before the Medical Class of the University of Pennsylvania.

BY ALFRED STILLE, M.D., LL.D.

Professor of the Theory and Practice of Medicine and of Clinical Medicine.

Chronic articular rheumatism may follow the acute form of the disease if it is not treated promptly and effectually, or it may occur as a distinct disease occurring in damp weather and characterized by stiffness and pain in the joints.

If the disease appears originally in its chronic form the joints do not usually undergo any change, but the chronic stage follows an acute attack the joints are quite stiff. The pain in these cases often extends to the muscles, fasciæ, and long bones, and in syphilitic rheumatism the bones of the sternum and cranium are affected and covered with nodules. In this condition the moral conduct of the patient is, of course, not involved as in hereditary and acquired syphilis.

To go somewhat more into details the symptoms may be divided into the habitual symptoms and those which may arise during the exacerbations. (The chronic form of rheumatism is sometimes called "cold" rheumatism.) In these cases the sensibility to cold and dampness is rendered morbidly acute. When exacerbations occur the disease assumes a subacute type and all the joints become red, swollen, and warm. The pain is aggravated by heat. These exacerbations are of indefinite duration.

If the joints have not become positively deformed you may be moderately sure of a cure, at least, a cure may be hoped for. If a cure is not established the functions of the joints will never be re-established. These deformities of the joints are, of reality, lesions of the soft parts.

The treatment of the febrile or sub-acute form of chronic articular rheumatism demands the same internal remedies as in the acute form —the local application of heat, the use of the alkalies, moisture, local stimulants, narcotics, and sudorifics. In the chronic form, local stimulus and alteratives are especially indicated. Among the best of the local stimulants may be mentioned camphor, turpentine, ammonia, and chloroform and the more active stimulants, or counter irritants—iodine, cantharides, mustard, croton oil, moxas, and blisters.

In the treatment of chronic rheumatism of the more superficial joints blisters are the best application; for the deeper joints, such as the hip, I prefer moxas.

In the case of the elbow, knee, and ankle—joints a very excellent form of local alterative is sulphur in fine powder laid between the folds of linen and applied to the joints. Other remedies of value for the protection of the part from the air, and the maintenance at the same time of a gentle stimulating action, are the burgundy pitch plaster and the ammoniacal plaster with mercury. Croton oil and tartar emetic are but very rarely used. Where the shoulder is the joint affected a series of local blisters should be employed.

In all cases of rheumatism of the joints passive motions should be practised to prevent permanent stiffness of the parts, and the induced current of electricity should be frequently passed through the affected parts.

In passing, I must not forget to dwell upon the great efficacy of local hot baths. This I consider a most important therapeutical agent in chronic articular rheumatism. These baths may consist of hot, or warm water, air, or steam; and in this connection some of the saline, alkaline, or sulphuretted mineral waters

may be employed. Sulphuretted waters are very widely used in this country and in Europe in the treatment of this affection. It is this virtue which has given a reputation to most of the familiar springs on the continent of Europe.

Another curative agent of great usefulness in hot baths is the diaphoresis set up and this should be supplemented by horseback-riding and by walking. If the reaction which follows it is vigorous, sea-bathing is sometimes excellent. So too with regard to the cold, heat and sweating produced by the hydropathic packing.

The principal medicinal agents employed with good effect in chronic articular rheumatism are guaiacum, oil of turpentine, iodide of potassium, cod-liver oil, alkalies, and sulphur. It was in the treatment of this disease that cod-liver oil first gained its repute as a remedial agent. Guaiacum has been extravagantly lauded by some. The usual forms in which guaiacum is best adminisisted are the tincture and the ammoniated tincture in doses of ʒi-ij., three times a day, or the mistura guaiaci composita may be given in doses varying from f ʒ ss.–1, every four hours. The ammoniacal tincture is employed where additional stimulus is needed and the compound mixture where no stimulation is wanted.

There is a prescription used in England which has a great reputation in this disease and which I really think does a great deal of good, viz, the so-called "Chelsea Pensioner," from the fact of its first being used among the rheumatic old pensioners in the Chelsea Home.

Its ingredients are as follows :

℞	Of the flowers of sulphur,	two ounces.
	" cream a tartar,	one ounce.
	" powdered rhubarb,	two drachms.
	" guaiacum (resin),	one drachm.
	" clarified honey,	one pound.
	" powdered nutmeg,	two drachms.

M. S. Take two large teaspoonfuls at night and morning for three days in honey or mulled wine.

Of other medicines the oil of turpentine may be given in doses varying from f ʒ ss.—f ʒ j. thrice daily. Mention may also be made of the balsam of copaiba and the oil of cajuput. The latter in particular is said to be of great service by some.

Where the fibrous investments of the joints are swollen the iodine of potassium is a very valuable remedy. In those cases which are of syphilitic taint in addition to iodide of potassium, mercury is very valuable, but it should only be pushed to a slight extent. The best form of mercury is the bichloride, and it is best administered in the compound syrup of sarsaparilla. This mixture is most efficacious. All general systemic disorders should at the same time be sedulously treated with iron, quinia and other general tonics. If there is any biliousness purges should be judiciously administered.

In conclusion, I may say that if all of the forms of treatment which I have mentioned prove of no avail and if the patient can afford it, he or she should at once be sent to some tropical climate to spend their winters.—*Hospital Gazette.*

THE REMEDIAL AND FATAL EFFECTS OF CHLORATE OF POTASSA.

BY A. JACOBI, M.D.

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After all the previous remarks, the practical point I wish to make is this, that chlorate of potassa is by no means an indifferent remedy ; that it can prove, and has proved, dangerous and fatal in a number of instances, producing one of the most dangerous diseases—acute nephritis. We are not very careful in regard to the doses of alkalies in general, but in regard to the chlorate we ought to be very particular. The more so as the drug, from its well-known either authentic or alleged effects, has risen, or descended, into the ranks of popular medicines. Chlorate of potassa or soda is used perhaps more than any other drug I am aware of. Its doses in domestic administration are not weighed but estimated ; it is not bought by the drachm or ounce, but the ten or twenty cents worth. It is given indiscriminately to young and old, for days or even weeks, for the public are more given to *taking hold* of a remedy than to *heed warnings*, and the profession are no better in many respects. Besides, it has appeared to me, acute nephritis is a much more frequent occurrence now than it was twenty years ago. Chronic nephritis is certainly met with much oftener than formerly, and I know that many a death certificate ought to bear the inscription of nephritis instead of meningitis, convulsions, or acute pulmonary œdema. Why is that? Partly, assuredly, because for twenty years past diphtheria has given rise to numerous cases of nephritis ; partly, however, I am afraid, because of the recklessness with which chlorate of potassa has become a popular remedy. Having often met medical men unaware of the possible dangers connected with the indiscriminate use of chlorate of potassa or soda, I thought this Society would excuse my bringing up this subject. It may appear trifling, but you who deal with individual lives, which often are lost or recovered by trifles, will understand that I was anxious to impress the dangers of an important and popular drug on my colleagues, and through them on the public at large.—*N. Y. Record.*

Surgery.

ABSTRACT OF A CLINICAL LECTURE ON A REMARKABLE CASE OF ABSCESS OF THE DURA MATER AND BRAIN, FOLLOWING A BLOW ON THE HEAD.

BY I. B. YEO, M.D., F.R.C.P.

The patient, a well built healthy looking young man, at twenty-one, came into the out patient room of King's College Hospital, November 5th, 1878, complaining of sore throat, thirst, anorexia, headache and dizziness. He occasionally drank hard; got drunk four days before; been ill three days; had vomited. Ten days before had, as he stated, been struck on the head by a brick. Tongue coated, skin hot and moist, faced flushed, pulse 100, temperature 102, bowels confined. In the evening, temperature 105; fell to 102 during night, and remained at 102 for the rest of the next day (November 6th). November 7th, temperature 99·6, a.m. 102·6. November 8th, temperature normal a.m., 101 p.m. On the 9th the morning temperature was 97·2, and remained between this and normal for two days. He had perspired profusely, and his back was covered with an unusually dark and spotty sudamual eruption. Had also at times been a little drowsy. At the end of first week appeared convalescent; no headache, tongue clean, pulse 68, temperature normal. Nov. 12th, p.m., temperature 101·6. Nov. 13th, a.m., 98·2; p.m., 103. Nov. 14th, a.m., 102; p.m., 102·8. Nov. 15th, a.m., 101; p.m, 103. Nov. 16th, a.m., 100·4; p.m., 103·2; Nov. 17th, a m, 100·6; p.m., 104·2.

This was the culminating point of a second febrile paroxysm. Then followed a second remission or intermission, and during the next three days the temperature fell steadily.

Nov. 18th, temperature, a.m., 98·8; p.m., 102·4. Nov. 19th, temperature, a.m., 100.8; p.m., 102. Nov. 20th, temperature, a.m., 98·2; p.m., 99.

During this second paroxysm of fever he slept well, but sweated very freely at night. Pulse from 80 to 112, rising and falling with temperature. Tongue moist, and but slightly coated.

Nov. 21st, temperature, a.m., 98·2; p.m., 100·6. Nov. 22nd, temperature, a.m., 97·4; p.m., 98. Remission of three days. Nov. 23rd, temperature, a.m., 98·8; p.m., 101·2. Pain in left elbow-joint, which soon became swollen. It could not have been pyœmic. It disappeared completely with warm fomentations, and subsequently blistering two inches above the joint, which, at the autopsy, was found perfectly healthy. The temperature from Nov. 24th to Dec. 20th ranged as follows:—Nov. 24th, a.m., 98; p.m., 100·6. Nov. 25th, a.m., 100·2; p.m., 100·2. Nov. 26th, a.m., 100·2; p.m., 100·6. Prescribed quinine, three grains *ter die*. Nov. 27th, a.m., 99·2; p.m., 101·4. Nov 28th, a.m., 99·2; p.m., 100·4. Nov. 29th, a.m., 99·4; p.m., 99·4. Nov. 30th, a.m., 100; p.m., 101·8. Quinine to be taken four times a day. Dec. 1st, a.m., 98·4; p.m., 98·4. Dec. 2nd, a.m., 98·2; p.m., 97·4. Dec 3rd, a.m., 98·4; p.m., 98·8. Dec. 4th, a.m., 98·2; p.m., 98·4. During the last four days patient felt well; tongue clean, appetite good, elbow less swollen and painful, slept well. No headache for three weeks. Much emaciated. Dec. 5th, a.m., 99·6; p.m., 100; pulse 120. Dec. 6th, a.m., 100; p.m., 99·8. Dec. 7th, a.m., 99 6; p.m., 99·8. Dec. 8th, a.m., 99; p.m., 99·6. Dec. 9th, a.m., 98; p.m., 97·6. Now occurred another sudden rise of temperature, although he was taking quinine fifteen grains a day. Dec. 10th, a.m., 102·2; p.m., 102.6; complained of headache; quinine stopped; ordered salicylate of soda, twenty grains, three times a day. Dec. 11th, a.m., 99·6; p.m., 102. Dec. 12th, a.m., 101; p.m., 102·6., Dec. 13th, a.m., 97·6; p.m., 102·4. Dec. 14th, a.m., 100·4; p.m., 103·4. Dec. 15th, a.m, 101·4; p.m., 103·2. Dec. 16th, a.m., 104·2; p.m., 102.6. During last three days the rise of temperature accompanied by occipital headache and anorexia. Dec. 17th, a.m., 101·2; p.m., 103·6. Dec. 18th, a.m., 100·6; p.m., 101·4. The evening of this day he complained a little of intolerance of light. Dec. 19th, a.m., 100·2; p.m., 99·6. Pain in right side of head and right eye. Dec. 20th, a.m., 100; p.m., 98.8. Here the pyrexial stage ended. The temperature had been going

steadily down since the 16th, when he was ordered quinine, five grains every six hours. This was omitted on the 19th; great emaciation. It was not until Dec. 21st, forty-six days after admission, that he manifested unmistakable cerebral symptoms; and whereas the latent stage had been marked by acute paroxysmal pyrexia, with well-marked intermission, the cerebral stage commenced with a fall of temperature to 96·6, and this was associated with vomiting and profuse perspiration. At this time he became very drowsy, with a heavy expression of countenance, and complained of great pain in the right side of his head. It was now noted that the mouth was drawn a little to the right side. Pupils equal, marked photophobia. No anæsthesia or loss of power of motion. Abdomen retracted; pulse 116; respiration 32. Ice to the head relieved pain. From December 21st to 28th, less pain in head; there was drowsiness, vomiting, facial paralysis (lower half.) Temperature ranging from 95·2 a.m. to 99·6 p.m., there being slight variations between the temperatures in the right and left axillæ.

	RIGHT.		LEFT.	
	a.m.	p.m.	a.m.	p.m.
Dec. 21.	97·6	99	98·6	98·4
" 22.	98·1	99·2	98·2	...
" 23.	99	99·4	97·6	99·2
" 24.	97	98·8	97·8	99
" 25.	...	...	...	...
" 26.	97·2	98·4	97	99
" 27.	95·2	97	95·6	96·2
" 28.	96·6	96·6	96·8	96·6

It was now discovered that the story of a brick falling on his head was a fabrication. He had been struck a heavy blow by his wife with a heavy quart pewter pot. Dec. 29th, more headache, and about 9 a.m. he had a general convulsion, became rigid and insensible, and, during convulsion, mouth drawn to left. At noon mouth drawn to right. He was heavy and drowsy; pulse 64; pupils equal and reacting. Right eye well marked, showed signs of neuro-retenitis. Left eye, signs much less marked. There was little change during the next few days. He lay in a heavy, drowsy, apathetic state, answering slowly and hesitatingly, never incoherence or delirium. Every now and then he would cry out with pain in the head.

January 1st, temporary loss of power in left hand and arm; 3rd, weaker; tongue thickly coated; pulse 56; urine passed unconsciously; very drowsy; faced flushed; frequent sighing. On the 5th, rigor lasting three or four minutes; 7th, restless, yawning; 8th, better; less drowsy; 10th, very restless. Died suddenly at 5 p.m. At 4 he was talking, and answered questions clearly, though slowly. Temperature during last twelve days of his life ranged from 94 to 97, differing slightly on the two sides, very irregularly. Throughout the case the temperature ranged from 94 to 105. During high temperatures, no brain symptoms. During low temperatures, brain symptoms.

Post mort. Cicatrix 1½ inch long over frontal prominence, bone beneath redder than the corresponding portion on other side, also decidedly more prominent and a little rougher. Shallow abscess in dura mater, 1–1½ inch in diameter beneath the external scar. It extended about 1 inch to right, 1½ to left, of anterior portion of superior longitudinal sinus. Sac of abscess adherent to the bone, which was white and smooth, but red, rough and thickened around; no trace of fracture. Thrombosis of anterior portion of superior longitudinal sinus. Portion of dura mater containing a round venous cord connected with the longitudinal sinus adherent to frontal lobe. Cerebral convolutions flattened; brain dry and anæmic; membranes adherent to brain in right middle fossa. A small abscess, size of a filbert, in lower third of ascending frontal convolution above and in front of fissure of sylvius. Right temporo-sphenoidal lobe much distended, soft and fluctuating; when opened a considerable quantity of thin, yellowish, puriform liquid escaped. The cavity extended as far as posterior extremity of optic thalamus. No communication with ventricles, which appeared healthy; cavity, size of hen's egg; contained also a small amount of blood clot. Cavities of both abscesses lined by a distinct membrane. No trace of suppuration in the bone which presented, microscopically, characters of osteitis.

Let us, then, consider what bearing this case has, first, on the causes, the symptoms, and the

diagnosis of cerebral abscess; secondly, on the latency of cerebral abscess (this will lead us to consider the probable period at which the cerebral abscess in this case was formed). In the third place, we must dwell for a moment on the remarkable temperature we encountered in the course of this case, simulating as it did an anomalous kind of intermittent fever. Fourthly, we may attempt to answer the question, Was surgical interference called for at any period in its course? Fifthly: Had the affection of the elbow-joint anything to do with the cerebral mischief; and, finally, does the case throw any light on the question of cerebral localisation?

Of the causes of abscess of the brain, one of the commonest is inflammation of the middle ear, leading to caries of the petrous portion of the temporal bone; and in this disease the suppurative inflammation often extends, as it appears to have done in the case before us, by exciting phlebitis of one or more of the cerebral sinuses and their tributary veins, which become occluded by purulent thrombi. Injuries of the skull attended with fracture also not infrequently lead to the formation of cerebral abscess, as may readily be understood; but abscess of the brain arising from a blow on the head without fracture is a comparatively rare occurrence. It is, however, well known that this may occur, as Sir William Gull long ago pointed out. "In such cases," he says, "the injury excites inflammation and suppuration of the diploë of the bone, and the suppuration extends and involves the brain." But it was not exactly so that the abscess of the brain arose in this case, for examination of the bone reveals no evidence of suppuration in its substance. It would seem that the primary seat of suppuration was that part of the dura mater lying immediately under the injured and inflamed bone. Here a small, distinct, circumscribed, and encysted collection of pus was formed; the suppurative inflammation extended to the portion of the longitudinal sinus beneath it, which became plugged by a thrombus; and thence it further extended into a large collateral tributary vein, and excited suppurative foci in the two portions of the cerebral substance which I have described before.

The symptoms of cerebral abscess are by no means characteristic; they must necessarily be dependent on the situation of the abscess. They may, as we shall presently see, be entirely absent. Pain in the head, continuous and severe, is generally regarded as one of the most constant, and sometimes is the only, symptom present for months. In this case, pain was by no means prominent until the appearance of other cerebral symptoms. Rapid emaciation has also been pointed to as a striking feature in many cases, and we remarked the great emaciation in this case even when the patient protested that he felt quite well; but, since it was coincident with the occurrence of sharp febrile paroxysms, they seemed sufficient to account for it.

The mental symptoms in this case were precisely those which have been described by Sir William Gull. "Now and then," he says, "the only (mental) symptoms were a heavy expression, a disinclination to speak, and indifference to surrounding objects."

I have already said that the symptoms of cerebral abscess, especially those connected with sensation and motion, must necessarily depend on the locality it occupies; and from this point of view it has been pointed out by Huguenin, in the twelfth volume of Ziemssen's *Cyclopædia*, that, in the case of abscess of the temporal lobe, where our patient's largest collection was situated, "the difficulty of diagnosis is increased by the circumstance that no bands of fibres, which are direct conductors of sensibility or motion," pass through this lobe; and therefore an abscess in that lobe "may attain a considerable size, and may cause general symptoms of compression before any distinct symptom of local disease arouses the suspicion of a localised affection of the brain; and for this reason the acute abscesses belonging to this category, in the great majority of cases, have not been positively diagnosed."

But the diagnosis of cerebral abscess is proverbially difficult, and chiefly on account of the latency of its symptoms, of which I must now say a few words. Sir William Gull says that "abscess" following injury to the head "may remain latent for months or even longer"; and, again, "an abscess may lie latent in the brain for many months, and then acute symp-

toms may suddenly set in and the patient die in a few days." The writer in Ziemssen whom I have already quoted is equally emphatic on this head. "An acute encephalitis following a non-perforating injury of the head can run its course without one having a suspicion of its existence"; and, again: "Cerebral abscesses have been found, especially in the temporal lobes, the existence of which had not been betrayed during life by a single symptom."

So it is certain—and I wish particularly to call your attention to this—that, with the history of the recorded observations of cerebral abscess before us, it is impossible to form any positive opinion as to the period at which the abscesses were formed, which we discovered at the autopsy of the case we are discussing. They may have existed when he first came into the hospital. They were undoubtedly not very recent, for they were both encysted. If, however, as Dr. Ferrier believes, the smaller abscess in the ascending frontal convolution occupied the seat of the facial centre, and so gave rise to the partial facial paralysis which was observed, the formation of this abscess and the occurrence of the facial paralysis ought to have coincided in point of time; and the facial paralysis was first noticed on December 21st, *i.e.*, forty-six days after his admission, and twenty days before his death.

Next let us consider the question of temperature, which ran such a remarkable course in the case before us, simulating an anomalous kind of intermittent fever. The fact that the course of cerebral abscess may simulate that of some forms of fever had not escaped the notice of Sir William Gull, for he says: "Patients suffering from cerebral abscess may have symptoms so closely resembling continued fever, that it is extremely difficult, if not impossible, with any degree of certainty to say whether it is a case of fever or of organic disease of the brain." Huguenin, in the twelfth volume of Ziemssen, says: "Two cases occurred to us which, in consequence of our total ignorance of etiological factors and the entire coincidence of the symptoms with intermittent fever, were regarded as such." One of these cases he reports in full, and it bears some resemblance to this case. The case began with a high temperature (105 deg.) and sweating; then freedom from fever for four days. No head-symptoms. Then again a rise of temperature extending over three days, and reaching 103·2 deg.; and "energetic treatment with quinine." Then seven days of freedom from fever, but occasional vomiting, "attributed to quinine"; and frequent complaint of headache. But there was no further rise of temperature, and the resemblance to an intermittent or remittent form of fever was by no means so complete as in this case. Moreover, the case ran its course (as reported) in twenty days. Now, in the case before us, for twenty days no medicine was given; for we were anxious to discover the natural type of the fever, and it was not until the commencement of the third paroxysm that we began to give quinine. In Huguenin's case, an abscess was found in the left frontal, and another in the right temporal lobe. "This case,"* the author adds, "shows that abscess of the brain may be mistaken for intermittent fever, especially for one of irregular form; and the error is hardly to be avoided."

The occurrence, however, of a continued range of subnormal temperatures coincidently with the development of cerebral symptoms, and after a prolonged intermittent pyrexia, seems to be now recorded for probably the first time. Sometimes the left side would give the higher temperature, sometimes the right; so that these variations, though interesting to observe in themselves, were of no diagnostic value.

I cannot think the patient's life would have been saved by surgical interference, unless this had been had recourse to long before the symptoms appeared which seemed to justify it.

Then, again, what was the meaning of that curious affection of the left elbow-joint? It was not pyæmic; it disappeared completely after blistering, and no trace of mischief was found in the joint after death. Had it any relation to the brain-mischief? I do not know.

It must be admitted that the seat of the lesion in this case tended to confirm the theory of localisation; for the abscess in the ascending frontal convolution was situated in that

* The full report of this case will be found in Ziemssen's *Cyclopædia*, vol. xii, page 765.

portion of the surface of the brain which has been termed by Ferrier and others the facial centre: the portion which appears to preside over the movements of the lower facial region. This centre—*i.e.*, the facial—is in juxtaposition to the centre for the arm and hand; and this again is consistent with the temporary loss of power observed in the left hand and arm in this case. It is important also to notice that speech was unaffected in this case; and this affords a further confirmation of the almost universal association of aphasia with disease of the left hemisphere. "Had the lesion been in the corresponding part of the left hemisphere," as Dr. Ferrier observes in a note to me, "some affection of speech would certainly have been observed."—*British Medical Journal.*

An Operative Method to Combat Commencing Pyæmia.—H. Kraussold in v. Langenbeck's Archives, xxii, page 965, says: In a man 29 years of age at the Erlangen clinic amputation was performed just above the knee-joint on account of a badly united fracture complicated with an anuerism of the posterior tibial artery. Repeated and alarming hæmorrhage followed, and the manipulations necessary to control it in a manner destroyed the antiseptic precautions, so that on the fourth day pyæmia supervened with a chill. As the cause of the same was supposed to be a commencing suppurative thrombus of the vein, the latter was opened, and a discoloured fluid, along with the contents of a thrombus, escaped. Immediately after this the vein was exposed at Poupart's ligament, ligated at two points, and the intervening part, from two to three centimetres in length, removed. The femoral artery was also ligated in order to guard against further hæmorrhage. The temperature of the body sank at once to the normal, and the patient recovered without further untoward symptoms. Ligation of the vein, under similar circumstances, has been performed before with good results, and as soon as the diagnosis is established one should not hesitate to resort to it.—*Centralblatt*, No. 3, 1879.—*Cincinnati Lancet and Clinic.*

Dr. Roberts Bartholow has in press a large work on the "Practice of Medicine."

Original Communications.

SMALL-POX IN ONTARIO.

FROM 25TH OCT. LAST TO DATE.

BY A. A. RIDDEL, M.D.

[Read before the Toronto Medical Society, June 26th, 1879.]

Mr. President and Gentlemen,—In preparing a statement of small-pox in this province since October last to date, I have had necessarily to obtain whatever information I could respecting other localities from medical men residing there, or from some private friend or public official. Medical practitioners, in the neighbourhoods where I had heard or seen it stated in the papers that small-pox had existed, were written to. Some of them kindly replied to my inquiries, and furnished what particulars they could. A few have not been so accommodating. To the former, I wish to express my most grateful acknowledgments; to the latter, I would say, that I regret they have not found it convenient to reply. To those non-professionals who have supplied what details they could, I feel truly thankful. As, however, this paper will be sufficiently long to test the patience of the members this evening, and there is good reason to expect that some of those to whom letters of inquiry have been sent may yet furnish the required information, I will, with the permission of the Society, defer giving the returns from other parts of the province till a future occasion, when some of the anomalous cases that have come under my observation will also be referred to.

The cases occurring in this city will be noted in as near the order of their occurrence as could be ascertained. Those in private practice will be distinguished from those admitted into hospital. Among the latter will be given, however, three from other municipalities. Those that I have been called upon to visit in other places will follow. In order not to remind people of their recent affliction, and for other prudential reasons, no names will be given; but locality, age and sex, where ascertainable, will be noted.

No. 1. Oct. 25, 1878. This was an English male immigrant, aged 26, who had contracted the disease on board of the steamer on the way to Quebec. He was admitted to the Small-Pox Hospital from King St. West, and had a pretty full crop of healthy-looking pustules in the fourth day of the eruption. Varioloid. He had belonged to an anti-vaccination club in Yorkshire, to which he subscribed two-pence a month, and had been fined for not having had a child vaccinated. What he saw during the

time he was in hospital, cured him, he said, of his anti-vaccination views. Vaccinated.

2. On the 28th of the same month a little Italian girl, aged thirty months, was admitted from Chesnut Street. She was but a few days from Montreal; had confluent; was very low; could partake of no nourishment; and died in a few days. Not vaccinated.

3. On same day a brother of above, aged 18 months, with discrete. Not vaccinated.

These children had contracted the disease in Montreal. As far as known, no one was infected by them.

4. Immigrant referred to in No. 16.

5. Boarding-house keeper, spoken of in No. 16.

6. Boarder with above.

The reason for these cases not being given more fully here will appear presently.

7. On 4th Nov., a robust man, aged 27, was admitted from Duke Street. He was a street-car conductor. When first seen he had the usual symptoms of small-pox, with some miliary vesicles on the forehead. From the darkish redness of his skin, and the anxious countenance seen in the early stages of fatal cases, an unfavourable prognosis was pronounced. He was insomnolent, and soon became delirious. The pulse was 104, and fair in volume; but it shortly became small, irregular, and varying from 85 to 100. He could take but little nourishment. Sedatives were given to procure sleep, but with little effect till the 15th, on the night of which he slept well. Stimulants were freely employed from the outset. A symptom to be dreaded in confluent cases set in—obstinate constipation; upon which ordinary purgatives produced no result; and it was not till an enema of about 4 oz. of glycerine and three pints of water was given, that the bowels were relieved on the 14th. As they had not acted again up to the 20th, another enema was given, with a like result. Warm baths of 104° were employed; and, as he complained of the water being cold, it was raised to 110°. On removal from the bath he was wrapped in warm sheets, placed in bed, hot irons were laid about him, and he was well covered with blankets. A glass of strong hot toddy was then given. He became one disgusting mass of corruption; delirium, which had been absent for a few days, returned, and with it jactitation; and bed-sores formed on the nates. On the 21st the pulse was 120, barely perceptible, and flickering. The thermometer, used for the first time, gave 104·2 in the fork. Nourishing enemata were administered, as the stomach could retain nothing. On the 22nd he vomited dark biliary matter. Pulse 130, and very small. Thermometer 103°. He died the same day. This case is given more fully than the subsequent ones can be, as a typical one of the worst form of confluent in a robust, non-vaccinated adult. Sulpho-carbolate of sodium in 20 gr. doses, with tincture card. co., glycerine and water, was at first exhibited; but soon carbonate of ammonia in 10 gr. doses, with the same tincture, glycerine and water, was resorted to; injections of milk and whisky; six oz. whisky by the mouth per diem, with milk *ad libitum*.

8. Same day. A young man of 18, from Richmond Street West, with varioloid in fifth day of eruption. Vaccinated.

9. About this time a young man who had boarded in same house with No. 1, was taken with varioloid, and went to his parents just outside the city limits. Vaccinated.

10. Nov. 7. A married woman, aged 22, admitted from Spadina Avenue. She had a severe form of confluent, and narrowly escaped death She had no idea where she had been exposed, but thought she must have caught the disease in a street-car or in some store, and it was not till she had been a month in hospital that I learnt where she had been infected. Said to have been vaccinated when young, but no cicatrix could be seen. She had visited the house of No. 5.

11. A girl of 11, fully referred to after No. 18.

12. Nov. 10. A young woman of 18, with semi-confluent varioloid, from William Street. Vaccinated.

13. Same day. A driver of a milk-waggon, aged 25, in first day of semi-confluent varioloid, from University Street. Vaccinated. When convalescent he was kind and obliging to those who were very ill. This is the only tribute I can pay him.

14. Nov. 11. A middle-aged woman, mistress of the house where Nos. 1 and 9 had boarded, with varioloid. Stayed at home. Vaccinated.

15. Nov. 12. A lad of fourteen, boarding at same house as Nos. 4, 6, and 8, admitted. He had confluent of a bad type. Numerous abscesses formed in different parts of the body, and the legs became so contracted that it was by main force they were ultimately straightened. He had a hard struggle for life, but ultimately recovered. Not vaccinated.

16. Nov. 13. A young man of 21, admitted from Queen Street West, in second day of confluent. He was an epileptic, and had led a rather loose life. He had been visited by No. 13, from whom he had contracted the disease. The pustules at an early day coalesced, flattened, and assumed the ashy colour so frequently seen in fatal cases of confluent. There were some symptoms in this case that are not infrequent, but which it may be well to point out. On

the 17th and 19th he had diarrhœa, with a pulse of 100, but fair in volume, was exceedingly thirsty ; could swallow but little fluid, the greater part of that taken into the mouth returning by the nostrils—the last symptom being, as far as I have seen, a premonitory one of an early fatal issue, and was probably caused by ulceration of the fauces and larynx. The neck became greatly swollen—inflated, this being apparently caused by emphysema. Delirium was present, and, if not closely watched, he would be out of bed in a minute. On the evening of the 19th passive (hypostatic) congestion of a great part of the lungs was noticed, and he died early next morning. Vaccinated when young, but the cicatrix was exceedingly faint.

17. Nov. 15. A young man, aged 20, from same house at No. 7, and a street-car conductor also, admitted in second day of confluent. He had been a frequent visitor at the boarding-house of No. 5, Richmond Street West. He had been vaccinated on the 5th, on account of the illness of No. 8, as up to that time he had not been vaccinated, and the crusts (three) were well formed and characteristic. He nevertheless had a most serious attack of confluent ; which, as he was for days in a highly critical state, could not have been greatly modified by the vaccination. A few years ago it was insisted upon by some eminent members of the profession in Europe, that if persons infected with small-pox were vaccinated early in the disease, the vaccination would greatly modify or ameliorate the attack. It may, probably, have aided in saving this man's life ; but certainly, beyond the fact that he did not die, there is nothing to show that it was of the least service.

About six years ago a negro was admitted into the hospital, suffering from confluent of the worst type. On his left arm he had three as characteristic crusts as I have ever seen, having been vaccinated in Stratford some fifteen days before. As he died, it would be hardly right to infer that the recent and perfect vaccination had been of any benefit to him.

Patient No. 17 had gonorrhœa, which disappeared as the eruption progressed, but returned with severity when desquamation was nearly completed. This is a common occurrence. The other occupants of the ward and the attendant stated that he was "subject to fits," which, according to their description, seemed to be of a hystero-epileptiform character.

Up to this time, notwithstanding every effort had been made, it could not be ascertained how the disease had been introduced into the house in which Nos. 7, 8, 10 and 17 had become infected ; but the landlord and boarders very generally insisted that No. 8 had introduced it. It proved in this case, however, that circumstantial evidence is not always to be relied upon. Not being satisfied with the evidence adduced against the unfortunate No. 8, I examined the remaining inmates of the place, and found marks of recent pustules on the bodies of the landlord and a boarder. They could then remember that a sick immigrant, by the same steamer as No. 1, with a slight eruption on his face, arms, &c., and who said he had a bad cold, had boarded there for upwards of a week, that after he left they were poorly, and had some "pimples and spots ;" and that No. 8 took ill as they were getting better. In the face of these facts, this obstinate jury absolutely refused to bring in a verdict of acquittal in favour of No. 8. They acted like some members of our own profession, who, not observing that a man they had been examining was minus an eye, might obstinately assert that therefore he had two eyes—a curious application of deductive philosophy. With your permission, I will place the immigrant first spoken of as No. 4, the boarding-house keeper as No. 5, and the boarder as No. 6, that seeming to be their proper order. It will be seen in the sequel that several persons were contaminated, directly and indirectly, by this immigrant, and that some of them lost their lives. It will be observed, too, that a great proportion of the cases in this city was traced to immigrants by the same vessel, and it is not altogether improbable that many of those whose history could not be elicited originated from the same source. But it was not in Toronto alone that the immigrants disseminated disease and death ; but around London, in West Zorra, away in the North Riding of Victoria, and most likely in other places where they may have travelled or settled. It says little for the lax system observed in the inspection of vessels at Grosse Isle, when passengers, from vessels on board of which such a contagious disease existed, should have been allowed to scatter all over the country without having first passed through a regular quarantine.

18. About the same time it was learnt that a brother of No. 16, aged 9 years, had been taken ill with small-pox. His father, thinking that because his elder son had died in the hospital, patients were not properly treated there, sent him to a pious old lady about a mile beyond the city limits. Her recommendations were—denunciation of hospital treatment, of which she knew absolutely nothing ; her professions of knowing how to treat the disease better than all the doctors in the country ; and an assurance that she would cure the lad in a few days. The second or third day after he had been taken to her house he died ;

a medical man being called in when he was dying, to save appearances, and take the responsibility off her shoulders. Vaccinated.

It also came to my knowledge that a girl, aged 11, a passenger by the steamer so often referred to, and living next door to the house from which No. 12 had been removed, had been ill for some time with an eruptive disease. On calling, I found her recovering from confluent. The people of the adjoining houses had intermingled, and hence No. 12's illness. No. 21 had visited the house while the girl was sick, and doubtless had been then infected. I have placed this patient as No. 11, the nearest I could conjecture as to her proper position. Girl not vaccinated.

19. Nov. 16. A married man, aged 25, admitted from Clyde Street, in the third day of confluent. He was a passenger in the same steamer as Nos. 1, 4, and 11. By the 21st the eruption assumed the dark purple colour so indicative of the malignant form. The pulse was bounding, and 112. Next day fluids returned by the nostrils. The thermometer in the fork gave 102·5. He died on the 23rd. Said to have been vaccinated when young, but the cicatrix was barely visible.

20. Nov. 18. A man, aged 40, admitted from the boarding-house of No. 5. When seen before admission there was one peculiarity that I do not remember having observed in any other case. There were numerous miliary vesicles on the forehead, but in continuous transverse lines, not in patches, or dotted irregularly, as they usually are. He had semi-confluent varioloid. Vaccinated.

21. Nov. 20. A married man of 28, admitted from Grog Lane, with varioloid. Vaccinated.

22. Nov. 22. A married man, aged 30, admitted from Yonge Street, in second day of semi-confluent varioloid. On the 24th the pulse was 80 and very small. On the 25th 100, but not quite so feeble, and next day 104. The thermometer gave 100.6 in the fork. On 27th the pulse was 108: thermometer 100. These particulars are given to show how variable the pulse is in cases of severe varioloid; and that, too, notwithstanding stimulants may be freely employed, as they were in this instauce. Vaccinated.

23. Nov. 28. A boy, aged 4 years, son of the caretaker of the hospital, and residing there, was feverish during the preceding two days, and had most offensive diarrhœa. This morning I detected one single small vesicle on his forehead, but during the day a plentiful crop, denoting confluent, made its appearance. He had been vaccinated two and a-half years before by one of the public vaccinators, and had two shallow and imperfect-looking cicatrices on the left arm. From the severity of the attack after so recent a vaccination, I think he must have been vaccinated from a crust of a re-vaccinated person, as the crust and lymph from a re-vaccinated party seldom afford more than an ephemeral protection. On the 29th his pulse was 130, and fair, and the same on the 30th. On 1st Dec. it was 128; 2nd, 124; 3rd, 130; 4th, same in number but smaller, it having been pretty fair up to that day. On 5th it was 144, and scarcely perceptible, with delirium, jactitation, painful and difficult deglutition, and short, catching respiration. Owing to his restlessness, a proper examination of the chest could not be made; but, from what little could be learnt, I felt satisfied that the case was complicated with broncho-pneumonia. Mucous râles were present throughout the upper part of the lungs; the smaller bronchi seemed impervious, and the lower and posterior portions occluded.

Here permit me to observe that where passive congestion sets in previous to the appearance of the eruption in perfectly confluent cases, I have found that they invariably terminate fatally. I do not know whether this has been the experience of others who have had much to do with the disease. From what I have seen, I feel disposed to put them down as truly malignant, and think I would not be altogether unwarranted in so doing. A fatal issue has generally supervened when this form of congestion has followed the appearance of the eruption in badly confluent cases. The blood, highly charged with the virus, seems to course very slowly through the vessels, and gradually to fill up the capillaries of the lungs. Position has little, if anything, to do with the production of this condition. I trust I may be excused if prominence is given to a case like this, it being typical of the worst form of confluent, complicated with broncho-pneumonia, and in all probability ulceration of the pharynx and the superior border of the larynx. This pharyngo-laryngeal trouble, however, may be thought somewhat hypothetical. Dry statistical details are not always interesting; and, in a subject like that treated of in this paper, would not be highly entertaining or instructive.

The treatment adopted in this case was: T. catechu and T. opii camph. with syrup and water, to check the diarrhœa; brandy; potass. chloras, with T. Card Co., glycerine and water. Later on, carbonate of ammonia with glycerine and water; and grains 1½ Dover's powder to procure rest. Hot baths, with carbolic acid. The room was kept at 70° Fah.; the upper sashes of the windows lowered, so that as much of the impure air as could be got rid of might escape and its place be supplied by pure. No window-curtains are used in the hospital. In

most cases it is found necessary, however, to hang dark quilts on clothes-horses to protect the patient's eyes from the light. The rooms are therefore not so gloomy as they would be if curtains kept out the light, nor is the air as impure as it would be if the curtains were hung inside the open window. During the pulmonary symptoms hot bricks in pails of hot water were placed under the edges of the bed for days together, in order to maintain a warm, moist atmosphere about the patient. As much milk as he could take was given. Ophthalmia, of a threatening character set in; but this was gradually subdued after a long-continued application of atropine gr. j, zinci sulph. gr. ij, to the ounce of water. As a consequence of this affection of the eyes, the boy has now a "speck" at the lower border of the cornea of one of them, the nature of which I must leave Dr. Reeve to describe, as I understand he has seen him. He ultimately recovered, pretty badly marked, it is true; the strictest watch, and the tying up the hands in socks, could not prevent his tearing the scabs off his face as fast as they were formed.

(*To be continued.*)

We have received the following letter in reference to our review of Dr. McSherry's book in the July number of the JOURNAL:

GENTLEMEN,—Please accept my thanks for your favourable notice of my work on *Health, &c.*, in the July number of your excellent journal.

Upon two points where issue is made, I imagine our opinions after all are not very much at variance.

A boy in his fifteenth year, having the elements of a good English education, may have his attention directed to his probable pursuit, and begin directly or indirectly, as may be, to prepare for it. If to be a physician, *e.g.*, I would not send him to the dissecting room—but he should learn, with languages, elementary chemistry, physics, and physiology.

If to be a merchant, he should learn book-keeping; if to be a builder, contractor or engineer, mathematics, drawing, mechanical forces, &c.

A protracted education—a long course at school or college—without special aim, often seems to *unfit* a youth for the practical work of life.

As to water-filters, I recommend their use; but the manner and kind must be learned experimentally. All, probably, require frequent cleaning or renewal.

You see altogether my design in the work, and evidently appreciate it. I wished to write something for the general reader for family use, in fact, that would convey instruction, in a style to invite unprofessional readers. I proposed rather suggestion than didactive teaching; for I fully understand that, in detail, the physician will usually be, or ought to be, the guide of families in all minutiæ of domestic hygiene.

I am, yours, with great respect,

RICHARD MCSHERRY, M.D.

Baltimore, July 8th.

Formularies.

MISTURA GUAIACI IN CLEAR SOLUTION.—Mix half a drachm to a drachm of a rectified spirit tincture of guaiacum with one or two drachms of glycerine for a dose.

UNGUENTUM VASELINI PLUMBICUM.—Made by melting and stirring together equal parts of emplastrum diachyli and vaseline is a good substitute for the unguentum diachyli of Hebra. It is not so liable to become rancid, and is more easily prepared.

COMPOUND TINCTURE OF IODOFORM.

R. Iodoform	gr. 15
Potass. Iodid	ʒii.
Glycerine	ʒii.
Alcohol fortius	ʒvi.

M.

Rub up the iodoform and potass. iodid, then add the glycerine, and rub it up to the consistence of thin cream, then add the alcohol and stir briskly. Dose, fifteen drops three times a day on sugar or in syrup.

ROSEN'S LINIMENT.

Nigier makes a communication upon the preparation of Rosen's liniment, used with success in the chorea of children. The formula, according to the codes, is the following:—Spirits of juniper, 90 grammes, (ʒxxii-iii), essence of cloves, and oil of musk, each five grammes (ʒi¼). Nigier proposes to add one gramme (15 m.) of castor oil, which will make an excellent liniment.—*Le Sperimentale.*

A Good Formula for Administering Podophyllin.

℞ Podophylli ..... gr. ij.
Essentiæ zingiberis ..... ʒij.
Spts. vini rectif. ad ..... ℥ij.

Fiant guttæ.

A teaspoonful to be taken in a wineglassful of water at bedtime every night, or every second, third, or fourth night, as required.—*Horace Dobell, in Brit. Med. Journal.*

For Tympanites.

℞ Tinct. colocynth ..... m. x.
Aquæ ad ..... ʒiv.

M. Sig.

A teaspoonful every three or four hours for an adult.

Lotions for Acne Rosacea—(Scatliff.)

No. I.

Bathe the face six times a day with very hot soap and water. If any irritation result, spread the oil of sweet almonds on the skin. This treatment has proved promptly efficacious in several patients. Dr. Hendry recommends the bisulphite of soda in doses of fifteen to twenty grains three times a day, or the hypo sulphite in somewhat larger quantity. He administers, previously, small doses of calomel and jalap. Finally, when the acne begins to disappear, he prescribes nux vomica three times a day, before meals.—*L'Union Médicale.*

No. II.

Hydrochloric acid, ½ drachm; rectified spirit, 1½–5 drachms. Mix. Solution No. 1.

Chlorate of potash, 1 drachm; distilled water, 3 ounces. Mix. Solution No. 2.

By means of a brush dipped in solution No. 1, the acne pustules are rapidly touched, and wiped by a pledget of cotton wool; the cauterised point is then moistened with a bit of charpie dipped in the chlorate of potash solution. This second application has the effect of mitigating the irritation produced by the acid, and of preventing any inflammatory reaction. Repeated every two or three days this application withers and dries up the pustules, which finally become detached.—*L'Union Médicale.*

Translations.

From his experiments on the influence of artificial respiration upon the arterial blood-pressure, Kowalesky concludes, in a general way, that artificial respiration, regarded from a purely mechanical point of view, instead of facilitating the circulation, rather acts as an obstacle to it.—*Lo Sperimentale.*

Iodide of Potassium in Small Doses for Persistent Vomiting.

Dr. Corsi says that he has found this means succeed in cases which had resisted all the ordinary remedies. Dr. Formica also cites a case in which the usual means had been exhausted. He administered iodide of potash in the proportion of two centigrammes ($\frac{3}{10}$th grains) in 100 grammes (ʒiij) of water, to be taken in teaspoonful doses every hour and a half.

Dr. Giné has confirmed this anti-emetic property of the iodide of potash, and recognises in this medicine given in the dose of one to five centigrammes ($\frac{3}{20}$ths to $\frac{3}{4}$ths of a grain) per day, a laxative virtue which may be utilized in constipation.—*Gazzetta Medica Italiana.*

Tetanus Cured by Salicylate of Soda.

The *Revista de Medicina of Cirugia Prácticas*, published in Madrid on 23rd of March last, contains the report of a case of this kind taken from the *Gaceta Médica de Cataluña*. A young and robust labourer got a splinter in his left foot, beneath the little toe; it was not extracted, but suppuration occurred, and the wound cicatrised. Sometime afterwards trismus set in, and subsequently tetanus attacked all the extremities, except the right arm. Chloral hydrate was administered internally, and opiate frictions employed externally. The symptoms gradually grew worse, and on the fifth day two grammes (ʒss) of salicylate of soda were administered in three doses. The following day the spasms had considerably abated, and the patient got two hour's sleep. The dose of the salicylate was increased to a gramme (15 grains). From this moment the suffering was mitigated, and motion gradually became possible, so that on the twenty-fifth day he returned to his occupation without any trouble.

A Simple Method of Treating Ozæna.

Dr. Gottstein, adopting the view of Michel that in ozæna there is enlargement of the nasal cavity from atrophy of the turbinated bones, and that of Wendt, that there occurs an atrophy of the mucous membrane, whence results a quantitative and qualitative alteration of the secretion, with consequent desiccation, putrefaction, and fœtor, recommends the following mode of treatment. He first frees the nose of all secretion by means of the douche, and then introduces into the nasal cavity a tampon of plain cotton wool of the thickness of a finger, and 3 to 5 centimetres long, in such a way that in the normal position of the head and its usual movements, it is quite invisible. The introduction is easily effected, especially in the numerous cases in which the lower and middle passages are converted into a single wide canal by atrophy of the anterior turbinated bone. The tampon is ordinarily left in for 24 hours, and after a couple of hours patients say that they feel the nose to be moist and in its natural condition. The wool acts both as a mild stimulant, favouring secretion, and as an absorbent of the secretion, hence preventing its desiccation. If there be need to remove the secretion it may be drawn into the throat through the posterior nares without disturbing the tampon. If after twenty-four hours the wool be removed, the mucous membrane will be found moist, free from crusts, and devoid of any trace of fœtor. The tampon should be renewed every twenty-four hours. With this means of treatment there is great relief to the sensation of frontal oppression and dryness of the throat. If, along with the atrophy, hyperæmia exist, then make use of insufflations of one part of salicylic acid with two of burnt magnesia. This method has been tried by its author in fifteen cases of ozæna, and in all with prompt benefit.—*Gazetta Médica Italiana.*

Dr. A. M. Lyles (*American Practitioner*, May, 1871) has found that ten drops of nitro-muriatic acid in a wine-glassful of water, one hour before eating, is an almost unfailing remedy for urticaria.

Dry Suture with Linen Bands armed with Hooks and Fixed by means of Collodion.

M. Horteloup read a communication from Dr. Dubreuil, of Montpellier, on a process of dry suture which that surgeon seeks to withdraw from the oblivion into which it has fallen, and which, moreover, has often given him good results, either to obtain immediate union or to unite the borders of a wound which is suppurating, and to hasten its cicatrisation. It consists in attaching to the skin of each lip of the wound a small linen band by means of a layer of collodion. To each of these bands are fastened a certain number of hooks, exactly like those used by dressmakers. The two linen bands being fixed to the skin, previously washed and dried, caoutchouc threads are passed once or twice alternately from the hooks of one side to those of the other, and the thread is knotted. After an amputation of the breast, in which the wound was 10 c.m. wide, M. Dubreuil found only 5 c.m., after having employed his process of suture without needles, and the following days, on account of the elasticity of the caoutchouc, the wound closed still more.

Poisoning by Iodoform.—Not much is at present known of the toxic effects of iodoform, and considerable interest therefore attaches to two cases which have been published by Oberlander. The maximum dose given was ·8 gram in a pill. The symptoms of poisoning occurred in one case (a woman twenty-six years of age) after forty-two grams of iodoform had been taken in eighty days; in the other case (a woman sixty-nine years of age) after five grams had been taken in the course of seven days. The symptoms produced were giddiness, vomiting, and deep sleep, from which the patient could be roused with difficulty. This somnolence was interrupted by periods of excitement, each lasting several hours, and was followed by delirium, intense headache, sense of impending death, spasmodic contractions of the facial muscles, and in the case of the younger patient, diplopia. The functions of the other sensory organs were not disturbed, and the pupils presented a normal reaction. Deep inspirations alternated with apnœa of about a minute's duration. After five or six days the toxic symptoms gradually lessened and passed away.—*London Lancet.*

THE CANADIAN

Journal of Medical Science,

A Monthly Journal of British and Foreign Medical Science, Criticism, and News.

TO CORRESPONDENTS.—*We shall be glad to receive from our friends everywhere, current medical news of general interest. Secretaries of County or Territorial medical associations will oblige by sending reports of the proceedings of their Associations to the corresponding editor.*

TORONTO, AUGUST, 1879.

CANADA MEDICAL ASSOCIATION POSTPONEMENT.

The meeting of the Canada Medical Association is postponed from the first to the second Wednesday in September.

Arrangements will be made with the different Railroad and Steamboat Companies for the usual reduction in the fare of members, certificates for which can be obtained from the Local Secretaries, Drs. L. Allison, St. John, N.B.; Lawson, Halifax, N.S.; Burgess, London, Ont.; and Osler, Montreal; and from the General Secretary, A. H. David, M.D., Montreal.

COUNTER PRESCRIBING.

"*Quousque tandem abutere patientia.*"

In the February number of the *Canadian Pharamaceutical Journal*, is an extract from the London *Daily Telegraph* on counter prescribing. The writer of the article endeavours to show that the poorer classes derive great benefit from the cheap and ready *help* (?) of the chemist, and the usual arguments are brought forward in support of this position. It is urged that the druggist does not charge much, and that his patients are not humiliated or pauperized by consulting him, as they pay *full price* for what they have. This is, indeed, too often the case, though not in the sense that is intended. Full price is only too often paid for such treatment and advice. Our experience, like that of many others in this city, has shown us the disastrous results of such *cheap and ready help*. How often have we seen, both in private and dispensary practice, children who have been in perfect health, brought to death's door by exhausting diarrhœa that has its starting point in the worm powders or mixture obtained from the druggist, because the child either picks its nose or grinds its teeth! How many children die annually, or have their nervous systems completely deranged and their constitutions perhaps ruined for life, by the soothing (?) syrups of the Mrs. Winslow class, mixtures which, as has been proved by analysis, often contain poisonous doses of morphia. If there are ailments "that simply require a little medicine promptly given," in nine cases out of ten it is far better for the patients if they cannot obtain the expensive (?) treatment of a qualified physician, that they should obtain no treatment, than have to depend upon the diagnostic skill and therapeutical knowledge of the druggist, no matter how thoroughly qualified he may be in his own line of business. The pride that will deter a poor man from accepting gratuitous medical advice and attendance is too often a pride that brings death or a shattered constitution to his child, and frequently entails the expense of a long attendance by a physician, who, in the end, has to be consulted for the results of an ailment that might have been checked by a timely resort to a qualified medical man. This we have seen over and over again. How can a druggist, no matter how skilled he may be, devote the time necessary or acquire the requisite knowledge for the thorough investigation of a case—an investigation that should always be made, no matter how trivial the symptoms may seem on the surface? It is absurd, and is a evidence of great ignorance to say, that "no man or woman really ill could or would come out of doors to be treated;" dangerous or even fatal illness is due to this very fact, and too often the chemist presumes that the sick are well enough to be safely and beneficially treated by him, because they *seem* well enough to be out. The evils that ensue are, it is true, often due to errors of omission rather than to errors of commission, but they are none the less grave evils, even if, as is sometimes the case, the medicines given are powerless for either good or harm. We hope that the Medical Council, when it prosecutes unregistered practitioners, will turn its atten-

tion to the unlicensed practitioners of the counter prescribing class. It is no injustice to the druggist to compel him to mind his own business, and, if any one loses pecuniarly, it will be the physician, who often profits by being called in to repair the damage done by the prescribing druggist, while the public will be the gainers by being protected from such mischievous meddling.

CANADA MEDICAL ASSOCIATION.

This Association meets this year in London, on the first Wednesday in September. It is to be hoped that a large number of the profession, and especially those in Western Ontario, will attend. County and Territorial Medical Societies should at once appoint delegates. It should be remembered that all that is necessary for any one in good standing to become a member is to be duly proposed and seconded.

The following are the committees appointed last year, the first name mentioned of each committee being the chairman, from whom a report will be expected. We trust that many papers will be prepared. It may be as well to remind those intending to read papers, that half an hour is the time allowed by the rules of the Association.

Committee of Arrangements—Drs. Bucke, Fraser, Stevenson, Payne and Cattermole.

Committee of Publication—Drs. Osler, F. W. Campbell and Fenwick.

Committee on Medicine—Drs. I. H. Cameron, Toronto; George Ross, Montreal, and R. Zimmerman, Toronto.

Committee on Surgery—Drs. Canniff and McFarlane, Toronto; and Roddick, Montreal.

Committee on Obstetrics—Dr. McCallum, Montreal; Dr. Fraser, London; and Dr. Robillard, Montreal.

Committee on Therapeutics—Dr. Parker, Halifax; Dr. Kollmyer, Montreal; and Dr. Fraser, Sarnia.

Committee on Medical Education—Drs. C. Covernton, Workman, and Marsden.

Committee on Climatology—Drs. Botsford, Larocque, Kerr, and Oldright.

Committee on Ethics—Drs. Howard, McDonald, Hingston, Robillard, Parker, Grant, Botsford, Marsden, Bucke, and Clarke.

INGLUVIN.

During the past few years so many new remedies have been discovered or manufactured, that have proved utter failures in the hands of careful practitioners, that many have come to look with an eye of disfavour and suspicion upon any new medicine, and hold themselves aloof from it until convinced by frequent reports from reliable sources that it is worth a trial. We are glad to give whatever recommendation our experience may be worth in favour of "Ingluvin," a preparation made from the gizzard of the domestic fowl, prescribed in the same manner and doses, and for similar diseases, as pepsin, which has often failed in our hands to produce the beneficial effects that have been claimed for it. We have not tried "Ingluvin" in the vomiting of pregnancy, though ample testimony from the highest authorities is given as to its remarkable efficacy in removing this troublesome and sometimes dangerous symptom. It is highly extolled, too, in sea-sickness, in diarrhœas depending on indigestion, and in cholera infantum, and from the benefit that in our experience has followed its use in indigestion, we shall, as opportunity offers, prescribe it in these affections. It is manufactured by a reliable firm, Messrs. Wm. Warner & Co., of Philadelphia, so well known for their elegant sugar-coated pills. This firm have also lately introduced sugar-coated "Parvules" minute pills, containing minimum doses for children and others. We have received two samples, one containing arsenious acid $\frac{1}{100}$ of a grain, the other quinine sulphate $\frac{1}{10}$ of a grain. If they are (and from their source we have no doubt they are) as reliable in composition as they are elegant in appearance, they will prove a valuable addition to the means of giving nauseous medicines to children. Dr. Leroy M. Yale, of New York, in a communication to *New Remedies*, for March, 1877, gives the results of his tests of the solubility of different kinds of quinine pills, his experiments proving the ready solubility of the pills of Warner & Co., and their superiority in this respect.

The Report of July meeting of Hamilton Medical and Surgical Society is held over for the September number.

Illicit Practice and Unholy Alliances.—We make the following excerpt from a recent leader in the *British Medical Journal*, not only because the remarks are in themselves worthy of attention, but also, because the evil which called them forth is as loudly crying in our midst as amongst those for whom they were more especially intended. "Lawyers and barristers have their own mode of protection against unlicensed and uncalled practitioners, and also against unholy alliances. A solicitor offending in this respect would be struck off the rolls; a barrister would be disbarred. Hence, the opinion of lawyers is, as might be expected, that the medical profession, as a body, should protect itself from the swarm of pretenders who are too readily believed in by the public. On the other hand, it may be urged by members of our profession that, as the public gain by the suppression of these men, their prosecution should be undertaken by the local authorities. It cannot be urged that the profession benefit, since too often the patients are suffering from purely fanciful ailments; while sums are obtained by quacks, which would never be demanded by orthodox practitioners, and would certainly never be paid. Local authorities do not acknowledge it as their business to prosecute these offenders, unless their proceedings become so scandalous as to bring them within reach of the law. Medical alliance and protection societies are not viewed favourably by the general public, who look upon them as trade-unions; and local medical socities are very averse to taking upon themselves such invidious duties, if, indeed, they can be considered as such. Hence, there are many strong reasons for urging that the Medical Council should, in future, take action to protect both the profession and the public from this crying evil, (and not, as here, delegate the responsibility of prosecution or non-prosecution to a detective who is answerable neither to the profession nor to the public.—Ed.) This is the more imperative from the recent action of some quacks. They have induced some members of the profession, who, from intemperance, impecuniosity, or other cause, have sunk to the lowest level, to act as their partners, and allow their names to appear on their doors. This is notoriously the case in Liverpool, and, we fear, in other large towns. Surely this is a matter of which the Council might be expected to take notice, involving, as it must, such a blot on the profession. Such conduct is surely 'infamous' in the fullest sense of the word, and the names of such offenders ought, without any delay, to be removed from the *Register*. Moreover, means should be adopted to render the practice of medicine by unqualified men much more difficult and dangerous than it at present is."

Book Notices.

Montreal Veterinary College Annual Announcement. Session, 1879-80.

Tenth Annual Announcement of the Woman's Medical College of Chicago. Session 1879–80.

Annual Announcement of the Medical Department of the University of Buffalo, for the Session of 1879–80.

The Future Influence of the John Hopkins' Hospital on the Medical Profession of Baltimore. By John Van Bibber, M.D.

Twenty-First Annual Announcement of the Chicago Medical College for the Session of 1879-80.

On Spasmodic Stricture of the Urethra. A reply to Dr. F. N. Otis. By Henry B. Sands, M.D.

Announcement of the Medical Department of the University of Pennsylvania for the 114*th Session*, 1879-80. Philadelphia, 1879.

University of Bishop's College 9*th Annual Announcement of the Faculty of Medicine, Montreal, Session* 1879-80.

University of the City of New York, Medical Department.—Annual announcement of Lectures and Catalogue. Session 1879–80.

Other Symptoms of Nervous Exhaustion, (Neurasthenia.) By George M. Beard, A.M., M.D., New York.

Bibliotheca Dermatologica. A Catalogue of Cutaneous Literature in the Library of Henry G. Piffard, M.D., New York.

Observations on Amphoric Respiration and Amphoric Respiratory Echo. By M. L. James, M.D., Pres. Richmond Academy of Medicine.

Pendulum Leverage of the Obstetric Forceps. By Albert H. Smith, M.D., Philadelphia: Reprint from Vol. III. Gynecological Transactions.

Posture as a means of Relief in Strangulated and Incarcerated Hernia. By FRANK H. HAMILTON, A.M., M.D. Reprint from the *Hospital Gazette*, June 7th.

The Detroit Medical College, (member of American Medical College Association) Detroit, Michigan, 12th Annual Announcement and Catalogue, 1879-80.

The Radical Cure of Hernia by the antiseptic use of the carbolized cat-gut ligature. By HENRY O. MARCY, A.M., M.D., Cambridge, Mass. Printed at the Riverside Press, 1878.

The Hand as as Curette in Post-partum Hæmorrhage. By HENRY P. C. WILSON, M.D., Baltimore, U.S. Reprint from Vol. II., *Gynecological Transactions*, 1879.

Conclusions from the Study of One Hundred and Twenty-Five Cases of Writer's Cramp and Allied Affections. By GEORGE M. BEARD, A.M., M.D., New York.

The Demand for a Woman's Medical College. —An address delivered at the commencement of the 7th Annual Course of Lectures and Dedication of the Woman's Medical College, Chicago, U.S. By CHARLES WARRINGTON EARLE, M.D.

Perineorrhaphy, with special reference to its benefit in slight Lacerations, and a description of a new mode of Operating. By EDWARD W. JENKS, M.D., Chicago. New York: William Wood & Co.

An Account of the Perineosinuexereeinator. A new instrument for the exploration of sinuses. By JACQUES ROBINSON, A.M., M.D., surgeon to the hospital for ruptured vesicles, member of the Anteversion Society and the Round Ligament Club, &c., &c. Reprint from Louisville *Medical News.*

If Josh Billings' had written this article he would have added N.B., "this is sarcastic." It is intended as a satire on the tendency for new names and new instruments.

Posological Table, including all the officinal and the most frequently employed unofficinal preparations. By CHARLES RICE, Chemist Department Public Charities and Corrections. New York: William Wood & Co, 1879. pp. 96.

The title sufficiently indicates the scope of this little work. It is well got up and will prove useful to either physician or druggist as a reference.

The Transactions of the American Medical Association. Instituted 1847. Vol. XXIX. Philadelphia, printed for the Association, Collins, Printer, 705 Jayne Street, 1878.

This volume contains the Minutes of the 29th Annual Meeting, Reports of Committees, Catalogue of Library, List of Members, Addresses, Minutes of the Various Sections, Papers, Code of Ethics, By-Laws, &c., &c., and the Prize Essay, by John A. Wyeth, M.D., on the Surgical Anatomy and Operative Sur- of the Innominate, and Subclavian Arteries and their branches. The book is a credit to the Association, contains much interesting matter, and is well printed. We hope to see similar transactions annually printed by the Canada Medical Association. To do this the membership fee should be increased.

Lectures on Electricity in its Relations to Medicine and Surgery. By A. D. ROCKWELL, A.M., M.D. New York: William Wood & Co., 1879.

This is a useful little book of 99 pages, containing seven lectures, originally published in the *Virginia Medical Monthly.* The lectures are Electro-Physics, Electro Physiology, Electro-Diagnosis, Method of Application, Apparatus, Treatment of Special Diseases, and Electro-Surgery. Dr. Rockwell is well known in America as one of the authors of Beard & Rockwell's work on the Medical and Surgical Uses of Electricity. The subject is briefly but clearly discussed, the author's method of general faridization and central galvinization being described. Some points not taken up in the last edition of Beard & Rockwell's work are inserted. Practitioners wishing to obtain a knowledge of the methods of applying and

indications for using electricity in the treatment of disease cannot find more useful information in a small compass than is contained in these lectures. We take pleasure in commending it to their notice.

An Atlas of Human Anatomy, illustrating most of the ordinary dissections and many not usually practised by the student, accompanied by an explanatory text. By RICKMAN JOHN GODLEE, M.S., F.R.C.S. Philadelphia: Lindsay and Blakiston, 1878. Part III.

This third part of Godlee's Atlas repeats the excellence, elegance, and accuracy which characterized parts one and two. Plate nine shows the dissections of the pterygo-maxillary region and the surgical anatomy of the common carotid. Plate ten illustrates, by five figures, the anatomy of the nose and the parts in relation, both externally and internally. Plate eleven represents the dissection usually made to expose Meckel's ganglion (fig. 1) and the otic ganglion (fig. 2). In plate twelve are five figures showing the interior of the skull (fig. 1) and the various dissections of the orbit (2, 3, 4, and 5). To the busy practitioner who has neither time nor opportunity for refreshing his memory by dissections, these plates will prove an invaluable substitute, and to the student, either as an aid in his dissecting, or as a reference in the intervals, they will be a reliable guide. Their study will afford genuine pleasure and profit.

Tablets of Anatomy and Physiology.—By THOMAS COOK, F.R.C.S. With an appendix containing most of the new discoveries of importance made known up to the date of publication. Second edition. Longmans, Green & Co., London. Toronto: Willing & Williamson.

The author in his title page quotes from Issac Watts, D.D., on "The Improvement of the mind." * * * * The frequent review of these abstracts and epitomes would tend much to imprint them on the brain, *when they have been once well learned*," (the italics are ours). This apt quotation exactly expresses our opinion of the position these tablets should occupy. We are glad that the author says they are not intended for the idle student or absolute beginners. For those who have carefully dissected, carefully read their text books, and attentively listened to lectures on anatomy and physiology, they will prove of great service in revising their work, completing their preparation for an examination, or referring to in the busy times of active practice. The author has done his work well and has given us two books that will greatly assist students in mastering the standard authors.

Demonstrations of Anatomy, being a guide to the knowledge of the Human Body by Dissection. By GEORGE VINIER ELLIS; from Eighth and revised English edition. Philadelphia: Henry C. Lea. Toronto: Hart & Rawlinson.

We have just received a copy of the American edition of this most valuable work from the publisher, Mr. Lea, of Philadelphia. Its entire arrangement and mechanical execution is highly creditable. As a work in the hands of a practical anatomist, it supplies every want. The general method observed in the description of the various structures and organs of the human body is at once complete and judicious. It possesses the merit of great comprehensiveness with marked exactitude of description. This we regard as a most important desideratum. Some of the larger works on anatomy are wanting in that systematic arrangement of the various parts which constitutes so marked a characteristic of Ellis' Demonstrations. Each part, as it comes under consideration, is disposed of regularly, commencing with the most superficial structures and proceeding through each successive step until the entire part is fully and accurately described. The student is also materially aided in his dissections by a set of illustrations which, for mechanical precision, are not excelled by any work that has come under our observation.

The author of this book has displayed an amount of painstaking labour in the execution of a task involving the necessity for an enormous amount of patience, such as lays the student of anatomy under lasting obligations to him. No one who has undertaken the mastery of this most important and comprehensive branch of professional study will fail to appreciate

the vastness of the undertaking which has culminated in so excellent a book as Mr. Ellis' last edition of his Demonstrations. We bespeak for it the same large share of support from all students of anatomy that it has hitherto enjoyed. Few men of science have set before them a more worthy object of intellectual effort, and fewer have completed their work with like fidelity and ability.

The Laws of Therapeutics; or, the Science and Art of Medicine. By Joseph Kidd, M.D. Philadelphia: Lindsay & Blackiston, 1879. Toronto: Hart & Rawlinson.

This is a small book, written, apparently, to glorify Dr. Joseph Kidd, who discusses the laws of therapeutics as embodied in the doctrines of "similia similibus" and "contraria contrairia." He is a believer in the former, though he does not go in for infinitesimal doses. An interesting chapter on the history of therapeutics from the time of Hipporcates down to the present day occupies the first fifty-four pages. The book is so full of quoted sentences from all sources, both professional and non-professional, that it requires attentive perusal to know when one is reading Dr. Kidd's words, or when those of Hippocrates, Hahnemann, Helmholtz, the *Quarterly Review*, Niemeyer, Plato, Prof. Houghton, Paget, Comte, Buckle, Carlyle, *Cornhill Magazine*, *The Mill on the Floss*, Tyndall, *Westminster Review*, &c., &c., &c. Originality, however, is found in the chapter on "Ars Medica," where numerous cases are related that Dr. Kidd cured by treating on the similia similibus plan, after such men as Dr. Burrows, Dr. Budd, Dr. Marshall Hall, Dr. George Johnson, Sir B. Brodie, Dr. C. J. B. Williams, Dr. Garrod, and Dr. John Harley, had either failed, or aggravated the disease. It is, to say the least, exceedingly bad taste to mention names in this way, and spoils a chapter containing short accounts of interesting cases successfully treated. Dr. Kidd appears to be a well-educated and successful physician, and should have been above trying to make capital out of the *apparent* failures of his professional brethren. Such a course is apt to cast discredit on the author's veracity, while it cannot harm the characters of men whose reputations as skilful and scientific practitioners are well established. It is rather surprising that so extensively a read man as the author should confound the *cicuta* that was given to Socrates, with the *conium* of the Pharmacopœia, as he does when speaking of the large doses of succus conü given by Dr. John Harley, in chorea. Among the startling cures recorded in this book, in support of the author's hobby, is one of a lunatic with a mania for eating grass, cured by a vegetable diet. A tailor (also a lunatic) in the habit of tearing his clothes to shreds, cured by having a bran new suit of clothes put on him. Exophthalmic goitre cured by belladonna, whose physiological action resembles the symptoms produced by the disease. The book is well printed, the paper good, and the binding neat.

Elementary Anatomy, Physiology, and Hygiene. For the use of Schools and Families. By Edward Playter, M.D., Editor of the *Sanitary Journal*. Toronto: Hart & Rawlinson.

We welcome this little book as a useful addition to our school literature. We feel it to be our duty to point out the fact that there exist certain inaccuracies in logical, syntactical, and etymological forms, which, especially in a book for school children, ought to be corrected in a future edition. As samples we may allude to such expressions as "rocks and other *metals*," p. 7; "volo *to* will," "the air near marshes.. contains the above-mentioned gases as emanating from sewers," p. 93 (intending, evidently, "contains the gases mentioned above as emanating"); "more injurious than it *otherways* would be," p. 99; "stratas," p. 102; "the mineral constituents of foods are *water* and various inorganic salts," p. 109; "eggs consist chiefly of albumen, with *considerable salts*," p. 112; "those who....perspire considerable," p. 136.

Then there is another class of expressions which we would like to see amended, even though a lame defence might be set up for them: *e.g.* on p. 20, "the blood-vessels, especially the heart."

As to the matter of the book: the First Part takes up the Anatomy and Physiology.

This part is well illustrated by plates and cuts; and a very judicious selection has been made of what is likely to be useful to, and absorbed by, the non-professional reader.

In the Second Part, after a few introductory remarks, we come to Chapter XII., "Air as Regards Health." In this chapter the author enters into the consideration of pure air, impurities in air, their effects, air space, ventilation, warming, and disinfection. After speaking of carbonic acid, and some other gases found in sewers, and "*an* organic compound" to which the fetid smell is due, he says: "These poisonous gases are very light, and, therefore, tend to the highest points." They are, of course, lighter than water or sewage, and are displaced upwards by these fluids, but our scholars would, we fear, suppose they were light as compared with their natural standard, air. In speaking of the removal of filth, our author omits all mention of the "*ventilation of drains*," as one of the requirements of good sewerage. This, we are sure, is an oversight. We would like to have seen a little more detail in the consideration of plans of ventilation. We do not think the general direction, "the "more directly the [incoming] current strikes "the ceiling, remember, the better it will be "diffused," always holds good. If in winter our incoming cold air could be led (as for example by tubes), into the immediate vicinity of the stove, and we could have our outlets at or near the base board, we could then have pure air, warmed, rising to the ceiling, and falling, fountain-like, through the room, before escaping. Our author says, "A stove of highly polished metal is better for warming than one of ordinary cast iron. A stove of sheet iron, or other iron which is not porous, is certainly less injurious than one of cast iron," and we are glad to see this point alluded to.

We would draw attention to the fact that in speaking under the head of spring and well waters being purified by being trickled through the soil, our author does not mean Toronto wells, for he, in a less conspicuous place, condemns wells of towns and cities as being in the vicinity of sewers. We think it would have been better not to have given any chemical tests for water, unless those addressed could have worked out those which are more correct and decisive. We are glad to see that the author lays great stress on the inefficiency of filters, unless frequently renewed.

The hint about ventilating cisterns is one which ought to be more universally adopted. In speaking of pork and other meats, no allusion is made to parasites.

As to the temperature of a sick room, we think it would have been better to have said that it ought "to be kept about 65°." It need not always be "not more;" in fact, cases do occur where it ought to be a little more; and, on the other hand, the wording does not put any check on the descending scale. When giving oil after irritant poisons, we must make an exception in the case of phosphorus; and we must give no water after oil of vitriol, unless we deluge the stomach with it—that is, unless we can add plenty of alkali. After strong alkalies have been swallowed, the "abundance of water" should be acidulated. In giving directions for using what appears like Silvester's method of restoring the apparently drowned, the author is rather obscure.

The book contains much valuable information for young folk, and we wish it success. The author in his preface desires critics to bear in mind that the book has been written amid the usual duties and interruptions of a practising physician and editor of a health magazine. It must also be borne in mind that the class of readers for whom it is written require a book accurate in matters of fact, and as faultless as possible in grammar and diction. In a second edition we trust to see our friendly hints acted upon.

A Guide to Therapeutics and Materia Medica. By Robert Farquharson, M.D., Edin., F.R.C.P. London, England, and adapted to the use of U.S. Pharmacopœia, by Frank Woodbury, M.D. Philadelphia, Henry C. Lea; Toronto, Hart & Rawlinson.

The second American edition, by Frank Woodbury, M.D., of this very excellent little work has come to hand. The fact that it appears so soon after the first edition is in itself a most gratifying return to the author for the labour bestowed upon its preparation, as well as an un-

mistakable evidence of the popularity of the work.

In the arrangement of the work the author has fairly accomplished one most important object in the matter of rendering it an acceptable and most valuable book for the student. He has succeeded most admirably, in our judgment, in collecting within the smallest possible compass all the important facts relating to the various remedies under consideration, and has so arranged them as to render the acquisition of an accurate knowledge of them comparatively easy. One noticeable feature in most of the large works upon therapeutics is the introduction of much matter of no practical value to the student, and rendering the task of familiarizing himself with the subject next to an impossibility within the limit assigned him for the pursuit of medical studies. In a work like this the student wants accurate views of the nature, properties, and uses of medicinal remedies, put in the form in which they can be most readily acquired. The author has pretty fully met these ends. The last revised edition also contains descriptions of a number of new remedies omitted from the former one; suggestions received in various directions from reviewers upon other parts of the work have been taken advantage of. In Part I., sections on acids, anæsthetics, astringents, narcotics and anodynes, stimulants, sedatives and tonics have been added. Some of the errors in the first edition have been corrected; others still exist, e.g., under benzoin, the dose of the compound tincture is given as ʒi-ʒii.: Under aloes it is stated to be mx-xxx. The dose of tinct. humuili is given ʒss-ʒii. Ammoniæ carb. is written instead of ammonii carb., &c., &c.

We commend this book to the hearty support of all who desire conciseness combined with a rare degree of completeness in the discussion of the subject.

The American editor has again done justice to the author, and earned high praise for himself in preparing the work to meet the requirements of the American student.

JOURNALISTIC.—*The Medical Herald* is the title of a new monthly published in Louisville, Ky. It presents a good appearance, and contains good matter.

Meetings of Medical Societies.

MEETING OF THE NEWCASTLE AND TRENT MEDICAL ASSOCIATION.

The second meeting of the above Association was held at the North American Hotel, Cobourg, on June 4th.

Dr. Herriman, of Port Hope, President, acted as Chairman, and Dr. Waters, as Secretary. After the minutes of the previous meeting had been read and approved, the committee appointed to draft a Constitution submitted the result of their labours for consideration, and after the clauses had been discussed in the usual manner, it was moved by Dr. Boucher, and seconded by Dr. Burnet, "That the Constitution, as read and amended, be adopted." Carried.

After the usual routine business had been disposed of, Dr. Hamilton, of Port Hope, exhibited a specimen of Tricocephalus Dispar, and made some appropriate remarks thereon.

Dr. Boucher, of Peterboro', described the process of operating for the removal of a cartilage from the interior of the knee-joint, reported after-treatment, and exhibited a cartilage he had abstracted.

Dr. Frazer, of Peterboro', then described a case of malignant tumour of the frænum, which he removed by amputation, for the benefit of the patient as well as the Association, to which it was presented. This case provoked some useful discussion on the subject of malignant diseases in general. Cases of epithelial cancer, epulis, and syphilitic ulceration were reported, and their distinguishing characteristics and appropriate treatment discussed.

Dr. Ruttan, of Napanee, then gave the history of twin sisters who were both affected with multilocular ovarian disease, one of whom died, as is usual in such cases, while the other got better by spontaneous cure in the manner explained. Several other matters of importance to the Association were also considered.

It was determined to submit a tarrif of charges for consideration at next meeting, at which time Dr. Waters will read a paper on Fracture of the Astragalus, and illustrate by cases; other gentlemen also promise to bring cases or pathological specimens.

Notice was given by Dr. Hamilton that a motion will be made at next meeting to allow gentlemen outside of the profession to become honorary members.

Moved by Dr. Hamilton, seconded by Dr. Thorburn, "That this Association meet three times a year, on the first Wednesday in the months of February, June, and October.

The Executive Committee shall consist of three members, to be appointed at each meeting.

Moved by Dr. Boucher, and seconded by Dr. Riddell, "That the Committee consist of Drs. Waters, Hamilton, and Thorburn."

It was then moved by Dr. Boucher, and seconded by Dr. Ruttan, "That the next meeting be held at Colborne, on the first Wednesday in October."

APPOINTMENTS.

J. L. Brown, Esq., M.D., to be an Associate Corner in and for the County of Oxford.

Andrew McKay, of the Village of Underwood, Esquire, M.D., to be an Associate Coroner, in and for the County of Bruce.

Alexander Robinson, of the town of Clifton, Esq., M.D., to be an Associate Coroner, in and for the County of Welland.

Dr. A. R. Robinson, a graduate of Toronto University, has recently been appointed physician to the skin department, Demilt Dispensary, New York.

OBITUARIES.

Dr. Tilbury Fox, the celebrated dermatologist, died in Paris on June 7th, aged forty-three. He had suffered for some years from angina pectoris and aortic disease.

Dr. Luther Owen Fox, father of the late Dr. Tilbury Fox, died on June 17th.

"Oh! would some power the giftie gie us."

The *Medical Press and Circular of London, England*, in referring to gluttony, says that the half-breed voygeurs of Canada, are very discontented when put on short short allowance of eight pounds of meat a-day, their usual consumption being from twelve to twenty pounds!!!

Miscellaneous.

Never give alcohol in chloral poisoning: it is most sure to intensify the symptoms, and make recovery more difficult.—*J. Crichton Browne.*

It is rumoured that Dr. B. W. Richardson has been offered £5000 for a lecturing tour in the United States.

Mr. Annadale reports a case in which he successfully excised sixteen inches of a varicose vein of the leg with antiseptic precautions.

Opium Habit.—Nitrite of amyl is said to remove the insomnia following discontinuance of the opium habit.

Canadians in England.—Andrew Murray Gibson, of Perth, has been admitted L.R.C.P., Edin., and L.R.C.S., Edin.

The Russian Society of Hygiene propose to print school books in white letters on a black ground, in order to check the increase of myopia in scholars.

Canadians Abroad.—Dr. Ralph Lesslie, of this city, has been appointed surgeon to Sir Garnet Wolesley's staff.

Cockroach Poison.—Equal parts of borax, Persian insect powder, and powdered colocynth is said, by the *Druggist's Circular*, to be infallible.

Error in Fownes' Chemistry (1878).—Page 159, the third line from the top should read, $(NH_3)_2\ H_2SO_4=(NH_4)_2\ SO_4$, instead of $(NH)_2\ H_2\ SO_4=(NH_4)_2\ SO_4$.

Treament of Shock.—Dr. Charles Hunter of Philadelphia, places the patient at once in a bath at 98° F. and raises the temperature rapidly to 110. Reaction quickly follows.

Corns.—Soften by an ointment of turpentine (one part), white resin (two parts), and yellow wax, (four parts). Then remove the corn, taking care to go deeply, and touch the bed with sulphuric acid to prevent return.

Large Urinary Calculus.—At a recent meeting of the Society of German Surgeons in Berlin, Dr. Von Langenbeck showed a calculus removed, *post mortem*, weighing 600 grammes (more than 21 ounces).

Aphasia from Anæmia.—Dr. Robert Koch describes a form of aphasia which is not dependent upon lesion of the brain, but is of a transitory nature and without sequelæ. It occurs in anæmia, and is immediately dependent upon cerebral hyperæmia.

Koumyss.—A good preparation should have a homogenous appearance of the consistence of thin cream, should be effervescent, of an acidulous, agreeably vinous odour and taste, and should not be full of lumps or taste like buttermilk.

Formula for Giving Alcohol in Disguise.

℞ Syr. calcis lactophosph .... ʒii.
Spts. frumenti..... ʒviss.
Glycerine..... ʒvj.
Tincture cinchonæ co ..... ʒiss.
Dose : according to indications.

McGill Medical College.—This school is to have a new Physiological Laboratory next session. Dr. Osler, Professor of Institutes of Medicine, has raised $1,000 for apparatus, and has ordered a complete set from Leipzig and London. Let our Ontario schools go and do likewise.

Temperature of the New Born.—M. Prouff.—The temperature, according to M. Prouff, falls after birth from 37°c to 34°c (98°-6 Fahr. to 93°-2). The temperature falls for two hours, it then remains stationary and afterward rises. M. Prouff thinks that this fact may be utilized in the diagnosis of real death.—*La France Médicale.*

Strangulated Hernia — Reduction by Esmarch's Band.—M. Denis-Dumont (de Caen) publishes in the *Annèe Médicale du Calvados*, two observations—one of inguinal, the other of crural hernia—in which reduction was accomplished by means of the elastic band with remarkable facility (one and two hours application of the bandage).—*Gaz. des Hôpitaux.*

Rickety Pelvis.—Prof. Depaul points out that in the rickety pelvis, at certain points of the upper aperture, beside a contraction, there are some sharp bony lamellæ cutting sometimes like the blade of a bistoury—corresponding in position to certain muscular insertions at the symphysis pubis or the ileo-pectineal eminence. These cause most serious mischief, and cannot be detected during labour.

Creasote Poisoning.—A child three and a-half years old took betweeen half a drachm and a drachm of creasote. In ten minutes the child became insensible ; feet and hands cold, pupils dilated, eyes turned up, pulse soft and frequent. These symptoms lasted three hours, when it became sensible for a few moments. It then became insensible, and died six hours after taking the poison. Treatment : Oil, white of egg, and milk.—*Ohio Medical and Surgical Journal.*

Length of the Fœtus.—For the first six months of intra-uterine life, the length at different ages is indicated in centimetres by the square of the numerical figure of the corresponding month. First month, one centimetre ; second, four centimetres ; third, nine ; fourth, sixteen, &c. For the last three months, the increase is from four to five centimetres a month. Seventh month, forty centimetres ; eighth, forty-five ; ninth, fifty centimetres.

Recovery after taking Three Drachms of Pulv. Gum-opium.—A case is reported in the *British Medical Journal*, of June 21st, of a woman who took three drachms of gum-opium, which she had previously pounded in small pieces and mixed in a cup of sweet-oil. Five hours elapsed before medical assistance reached her. She recovered under the usual remedies. Doubtless, the oil by suspending the undissolved opium prevented absorption and saved her life.

Extirpation of Substernal Goitre—E. Rose.—Patient, countryman, æt. 22, four years previous had noticed a swelling in the throat which had increased until was as large as an apple and interfered so seriously with respiration that its removel became necessary. The

tumor extended so far behind the sternum that not only the trachea but the great vessels were exposed and the finger pushed into the bottom of the wound rested upon the arch of the aorta, between the innominata and left carotid. 52 ligatures were applied. One secondary hæmorrhage followed—wound treated openly —Recovery complete.

GLOSSOPHYTIS.- Dessois is of opinion (*Thèse de Paris*, 1878): 1. That the black hue of the tongue and hypertrophy of the papillæ of the tongue are always connected with the presence of a vegetable parasite. 2. That this colouring must be ascribed to the fungus, from which it spreads to the long epithelial sheaths of the papillæ. 3. That the hypertrophy of the papillæ, which exists more or less before the affection breaks out on the tongue, and which proves a fertile soil for the parasite, is principally due, at a later period, to the irritation caused by this cryptogam.—*Lond. Med. Record*, April 15, 1879.

ANTIPYRETIC METHODS OF TREATMENT.—At a meeting of the Glasgow Medico-Chirurgical Society, Prof. Gairdner, after reviewing the history of cold-water bathing in fevers from the time of Currie down, criticising in detail the methods of Liebermeister, Brand, and others, closed with the following words: "I am myself perfectly open to conviction on the whole subject, only I confess I am not yet convinced that it is absolutely necessary to keep a fever patient suspended between pyrexia and collapse by means of cold baths, and still less that it is necessary to half poison him with digitalis and veratria, and then restore him with stimulants, in order to secure his safe passage through an attack of typhoid fever."—*Boston Med. Jour.*

HISTOLOGY OF TUBERCLE. — Baumgarten (*Centralbl. f. die Med. Wissenschaft.*, March 30, 1878,) has already drawn attention to the constant presence of a granulation tissue, containing epithelioid and giant cells, around ligatures placed on vessels, but he could not recognize nodules analogous to those of tubercle. More recently, he has observed around foreign bodies such as bits of hair, cotton fibres, and the dust which settles in all operative wounds, true tubercular giant cells; there is the same typical disposition of the nuclei at the periphery, the same protoplasm with its dark granules; the cells are sometimes isolated, sometimes surrounded by round or oval collection of lymphoid cells, often surrounded by a reticulum; no vessel could be recognized. No distinction could be drawn between their appearances and those of tubercle, but the growth showed no tendency to caseation or dissemination.—*Lond. Med. Record.*

STUDIES ON THE PHYSIOLOGY OF CONCEPTION. —Some interesting observations on this subject were communicated last year to the Berlin Medical Society, by Dr. L. Löwe. He has discovered that a single spermatozoon is sufficient to impregnate an ovum; indeed, that in nearly every case only one gains admittance, and that as soon as this one penetrates the walls, an immediate deposit, something in the nature of a chemical precipitate, takes place on the walls of the ovum, which prevents any further access of spermatozoa. Occasionally, however, two spermatozoa do gain admittance, either owing to their penetration being simultaneous or the animal being in ill health. When this is the case, the result is a double monster, or a malformation of some kind. The transparent eggs of certain fish are best suited to exhibit these processes.—*Med. and Surg. Reporter.*

HEART AND BRAIN.—At the fifty-first meeting of German Naturalists, in Cassel, Dr. Weidemeister made some remarks on the connection between heart-disease and mental diseases. Practitioners who are not exclusively psychologists are much inclined to consider cardiac affections as one of the causes of madness, while psychologists are of a totally different opinion. If his memory did not fail him, Bazin had found, in making *post mortem* examinations of lunatics, that in one per cent. of the cases there was disease of the heart. Witkowsky had found this in more than seven per cent., and Karrer of Erlangen in thirty per cent. Wishing to find some more definite numbers, he had for some years past carefully measured the hearts of lunatics, especially the left ventricle, and had found that in 75 per cent. of the cases there was thickening of the wall of the left ventricle, and that the latter was hypertrophic.—*British Medical Journal.*

Lactopeptine.—In the early part of the present year we received a large package of lactopeptine from the N. Y. Pharmacal Association, asking us to give it a fair trial and report the results. As it may interest those who have never used this agent in their practice, we answer through the *Clinic*. We have given it a full and fair trial, both in private practice and in the hospital department of an asylum, which is under our care. As a digestive it comes nearer the gastric juice (particularly when combined with a little extra hydrochloric acid) than anything we have ever used. Its formula shows it to be a strictly scientific preparation. Dyspeptics are generally greatly benefitted by its use. In vomiting in pregnancy it has relieved three-fourths of the cases in which we have tried it, and in cholera infantum (chronic) it has been of inestimable service in our hands.—*The Southern Clinic*, Richmond, Va.

On the Duration of the Life of the Fœtus in Utero after the Mother's Death.—This question has been carefully investigated by C. Gareczky, in his inaugural dissertation, St. Petersburg, 1878 (and *Wien. Med. Woch.*, No. 22, 1879). He has collected 379 cases, in which the Cæsarean operation was performed after death; 308 infants were extracted dead, 37 showed signs of life, 34 were born alive; but of these, only five remained alive for some time. The author then gives a sketch of Breslau's experiments on animals, and sums his conclusions up as follows: 1. The fœtus undoubtedly survives the sudden death of the mother. 2. If it can be extracted in the course of the first six minutes, it may be born alive. 3. Six to ten minutes after the mother's death, the child may still be alive, though slightly asphyxiated. 4. Ten to twenty-six minutes after death, the infant is highly asphyxiated. 5. In a great many cases, the infants are either highly asphyxiated or dead after the first minute. 6. The shorter the time is which elapses between the cause of the mother's death and the ceasing of the cardiac action, the longer the fœtus remains alive. 7. If the mother's death has been caused by some quickly acting poison, the chances for the child's life are greater than when it has been brought on by some other cause.—*British Medical Journal.*

The Permeability of a Stone Wall.—We have before referred to the experiments by Pettenkofer and others, showing the readiness with which gases permeate walls of stone or brick. A Buffalo paper gives the following account of a recent illustration of the same fact: "Yesterday Professor Doremus, of the Buffalo Medical College, performed a very interesting and instructive experiment before his class. A block of sandstone, such as is usually employed for window-caps and sills, and about twelve inches square and four or five inches thick, had a panel one half an inch thick sunk in each side. In each panel was fitted a block, which was perforated by a piece of common gas-pipe, and this was cemented about the edges. The whole was then coated with an impervious varnish. Air now entering the pipe on either side had access to the clean surface of the stone beneath the panel, and it was found that if the mouth be applied to the protruding pipe on one side, and a candle be placed in front of the opposite one, it could very readily be blown out by the air, which, with very little effort, was forced through the stone. When a rubber tube was connected with the house gas-pipe on one side of the stone, and a burner was attached on the opposite side, the simple pressure from the gas mains was sufficient to force the gas through the stone till it was lit at the burner on the opposite side. When by any means the pressure was increased, a very large flame was thus produced. This shows the premeability of building stone. Brick walls and the plastering of rooms are much more porous, and it is readily seen that unglazed tile, or stone, or brick sewers afford but little security against the escape of sewer gas.—*Boston Journal of Chemistry.*

Births, Marriages, and Deaths.

BIRTHS

At Enniskillen, on June 30th, the wife of Dr. Mitchell, of a son.

In Brantford, on June 12th, the wife of F. T. Jenkins, A.M., M.D., of a son.

At Hamilton, July 22nd, the wife of A. E. Mallock, M.D., of a son.

In Belmont, on June 6th, the wife of Dr. G. A. Marlatt, of a son.

DEATHS.

At Richmond Hill, on June 21st, Mary Ann Miller, beloved wife of James L ngstaff, M.D.

On July 20th, at Thornhill, Percy Norman Powell, infant son of Dr. J. McConnell, aged 1 year and 17 days.

TROMMER'S

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THE rapidly increasing demand for our IMPROVED EXTRACT OF MALT, during the four years that it has been manufactured and offered to the Medical Profession in America, justifies the belief that in its production here we are meeting a generally felt want.

Long experience in manufacturing Malt Extract has enabled us to completely overcome the many difficulties attending its manufacture in large quantity; and we positively assure the Profession that our Extract of Malt is not only perfectly pure and reliable, but that it will keep for years, in any climate, without fermenting or moulding, and that its flavour actually improves by age. Our Extract is guaranteed to equal, in every respect, the best German make, while, by avoiding the expenses of importation, it is afforded at less than half the price of the foreign article.

The Malt from which it is made, is obtained by carefully malting the very best quality of selected Toronto, Canada Barley. The Extract is prepared by an *improved process*, which prevents injury to its properties or flavour by excess of heat.

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Viz.: Malt Sugar, Dextrine, Diastaste, Resin and Bitter of Hops, Phosphates of Lime and Magnesia, and Alkaline Salts.

Attention is invited to the following analysis of this Extract, as given by S. H. Douglas, Professor of Chemistry, University of Michigan, Ann Arbor.

"TROMMER EXTRACT OF MALT CO: I enclose herewith my analysis of your Extract of Malt:

"Malt Sugar, 46.1; Dextrine, Hop-bitter, Extractive Matter, 23.6; Albuminous Matter (Diastase), 2.469; Ash—Phosphates, 1.712; Alkalies, .377; Water, 25.7; Total, 99.958.

"In comparing the above analysis with that of the Extract of Malt of the German Pharmacopœa, as given by Hager, that has been so generally received by the Profession, I find it to substantially agree with that article.

"Yours truly, SILAS H. DOUGLAS,
"Prof. of Analytical and Applied Chemistry."

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The dose for adults is from a dessert to a tablespoonful three times daily. It is best taken after meals, pure, or mixed with a glass of milk, or in water, wine, or any kind of spirituous liquor. Each bottle contains 1½ lbs. of the Extract.

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Extract of Malt,	With Hops	(Plain)	$1 00
"	"	Pyrophosphate of Iron (Ferrated)	1 00
"	"	Cod Liver Oil	1 00
"	"	Cod Liver Oil and Iodide of Iron	1 00
"	"	Cod Liver Oil and Phosphorus	1 00
"	"	Hypophosphites	1 50
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(See Transactions of American Medical Association, for 1876, page 176.)

Is presented to the Medical Profession as an efficient, palatable, and very stable combination, consisting of equal parts of the EXTRACT OF CANADA BARLEY MALT and the best quality of genuine NORWEGIAN COD LIVER OIL. Many patients take this preparation who can not take the oil in any other form. It may be employed in all cases where Cod Liver Oil is appropriate, but is peculiarly adapted to those complicated with disordered digestion.

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With Cod Liver Oil and Iodide of Iron,

added in the proportion of one grain to the dose. This combination is intended to meet those cases where the physician desires to add a more energetic alterative and restorative to the treatment with Cod Liver Oil and Extract of Malt. The manufacturers have received numerous letters from prominent physicians referring to it in terms of high praise.

THE

Canadian Journal of Medical Science.

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☞ **All Communications, Letters and Exchanges must be addressed to the Corresponding Editor.**

TORONTO, SEPTEMBER, 1879.

Selections: Medicine.

PUS IN THE URINE.*

BY CHARLES MURCHISON, M.D., LL.D., F.R.S.

Three tests are used to determine the presence or absence of pus in the urine.

1. In acid urine where there is a more or less creamy sediment with the upper part clear, heat produces greater or less opacity in the clear portion, and a much more marked one in the creamy layer. Pale lithates clear up on heating.

In alkaline urine, heat makes it a little more opaque (phosphates) cleared up by nitric acid; so that the two tests leave its turbidity much as it was before.

2. If liquor potassæ be added to the acid urine, the pus becomes viscid "ropy." If the precipitate be phosphates no change takes place. In alkaline pyuria the "ropy" change has already taken place.

3. The microscope shows pus corpuscles, identical with white blood corpuscles, a drop of acetic acid causes the granular contents to disappear and in its place a nucleus often three-lobed is seen.

Pus in pyuria may have five sources: I. Female genital organs; II. Urethra; III. Bladder; IV. Kidneys and ureters; V. Abscesses which burst into the genito-urinary channels.

I. Pus from Female Genital Organs is due to *a*, vaginal leucorrhœa; *b*, uterine do.; *c*, ulcerated os uteri; *d*, cancer of uterus; *e*, lochia; *f*, abscesses, (*e.g.*, pelvic cellulitis.) These are distinguished by (1) the clinical history and symptoms; (2) the microscope shows pavement epithelium from the vagina, cylindrical from the uterus, or cancer structure; (3) a purulent discharge independent of micturitions; (4) absence of pus when the urine is drawn by catheter.

II. Urethral pus comes away before micturition, and between micturitions; urine usually acid. Causes are gonorrhœa, abscess of prostate, Cowper's glands, or perineum. In prostatic abscess there is pain at the end of micturition; rectal examination shows tenderness and pain and on pressure pus (and calculi sometimes) forced out of urethral meatus. Prostatic abscess may simulate stone, but there is an absence of symptoms of a renal calculus having descended; there is discharge during intervals between micturitions; there is often a history of gonorrhœa, swelling and tenderness of prostate; and absence of signs of stone on sounding.

III. *Pus from the Bladder*, most of it comes away at the end of the micturition; it is viscid and like "ropy mucus;" urine usually ammoniacal, fetid, and deposits triple phosphates; pain in bladder above pubis, increased before or after micturition; tenderness above pubis; increased frequency of micturition. The causes are (*a*) cystitis, (*b*) calculus, (*c*) new growth. A. In simple cystitis there is (1) pain severest just before the micturition, relieved by it, (2) hæmaturia rarely, (3) retention of urine, caused by stricture, enlarged prostate, stone, fevers, paraplegia, gonorrhœa, poisoning by cantharides or blood-poisaning (*e.g.* gout); (4) absence of symptoms of stone or new growth.

B. *In Calculus* there is pain at end of micturition and for some time after, and often referred to the end of the penis. Hœmaturia

* Abstract of the last clinical lecture delivered by the late Dr. Murchison.

in small quantity, increased by exercise. Increased frequency of micturition, more especially during the day, the reverse being true in prostatic stricture; a sudden stoppage in micturition; a previous history of nephritic colic often; passage of a stone, red sand, or gravel; sounding.

C. *New growths.* Paroxysms of severe lancinating pain, independent of micturition; hæmaturia irrespective of exercise, irregular sometimes at long intervals, sometimes persistent, and copious, presence in the pus, the epithelial cells or villous processes; cachexia and emaciation; absence of stricture, prostatic disease, and other cause, possibly a hard, irregular, tender tumor felt by rectal or vaginal touch; possibly enlarged glands in the groin; thickening of the vaginal wall detected by the sound.

IV. Pus from kidneys or ureters, is at first uniformly mixed with the urine, but after a little settles as a creamy layer; urine acid as a rule but may be alkaline if there be cystitis; then the urine is turbid and does not settle. Pain and tenderness over kidneys, extending down to the bladder and penis; a tumor in the renal region may be sometimes detected. Increased frequency of micturition may be present. The causes are (*a*) certain rare cases of acute nephritis; (*b*) calculous pyelitis; (*c*) tubercular pyelitis; (*d*) pyelitis from obstruction.

In (*a*) certain rare cases of acute nephritis such as sometimes supervene in cases of carbuncle, boils, erysipelas, acute fevers, parturition, pyæmia, or gonorrhœa, there is a slight quantity of pus; degenerate products of nephritis in urine, epithelial, pus, or hyaline casts, etc.; the previous history of smokiness or other evidence in the urine of the existence of acute nephritis; 4, a quantity of albumen much too great to be accounted for by the amount of liquor puris; 5, general dropsy not uncommonly; 6, uremic symptoms possibly, such as headache, retching, drowsiness, coma, or convulsions; 7, the absence of any tumor to be detected externally; 8, a dry skin; 9, the previous history of one of the above causes. B. *Calculus pyelitis* is distinguished by: 1, a previous history, though not always, of nephralgia, a pain extending from the kidney to the testicle, penis, vagina, or thigh, attended with rigors, nausea, vomiting, frequent micturition, hæmaturia, retraction or swelling of the testicle, pallor, a quick, feeble pulse, and some fever, perhaps; 2, pain and tenderness, or simply a burning or aching, not necessarily in all cases, however, more or less constant in the region of one kidney or both, which is increased by much exercise and fatigue, or may be present only during fatigue; hæmaturia, especially when the calculus is composed of oxalate of calcium, and in any other case after violent exercise, while microscopic blood is usually present at other times; 4, a variation in the quantity of pus from day to day; 5, the absence of casts; 6, crystals of uric acid, or, not uncommonly, of oxalate of calcium; 7, a tumor in certain cases, not in all, more or less painful, in the kidney region, which enlarges when the quantity of pus in the urine diminishes, and becomes smaller, or disappears, when the quantity suddenly increases; 8, attacks of intermitting pyrexia, occasionally ushered in by rigors, and followed by profuse sweating, which are most severe when the tumour is largest; 9, the absence of dropsy and other signs of acute nephritis, though the patient may ultimately die of uræmia, due to the wasting of the secreting tissue of the kidney; 10, its duration, which may be a fair lifetime (one case lasted forty years), or may end favourably, by the stone passing into the bladder, or becoming encysted.

C. *Tubercular pyelitis* is distinguished by: 1, the absence of any history of renal colic; 2, a constant dull pain in the back, over one kidney or both, with exacerbations when the ureter becomes blocked, and which is accompanied by tenderness over one kidney, in nine cases out of ten. 3, hæmaturia not uncommonly, which is slight, and may be the earliest symptom, and then disappear; 4, the unvarying, or steadily increasing, quantity of pus in the urine; 5, the absence of casts from urine, and the presence often of amorphous granular matter insoluble in acetic acid, of particles of caseous matter, or fibres of connective or elastic tissue; 6, the absence of crystals; 7, the formation, if the ureter be blocked, of a tumor, which may point externally, or even stretch across the middle line (of sixteen cases, a tumor formed in seven); 8, persistent pyrexia, usually intermittent and hectic, with night-sweats; 9, as a rule,

persistent and rapid emaciation, but the patient may even gain flesh under treatment; 10, signs of tubercle in the lungs, bowels, testes, prostate, vertebræ, or elsewhere; 11, the fact that it occurs more frequently in males than in females; 12, the absence of dropsy and any tendency to uræmia, the patient dying from exhaustion; 13, the rapid progress of the disease, which rarely lasts two years.

D. *Pyelitis from obstruction of the urinary passages* is distinguished by: 1, the history and the symptoms of a primary obstructive disease, as cancer of the uterus, stricture, enlarged prostate, hydatids in the pelvis, etc.; 2, constant aching pain and tenderness in the back, over one kidney or both; 3, copious urine of a low specific gravity, with little urea or albumen; 4, a varying quantity of pus in the urine, possibly with casts, consisting of pus-cells from small abscesses in the substance of the kidney, or with an alkaline reaction due to the concurrent cystitis; 5, very commonly paroxysms of intermittent pyrexia; 6, the great tendency to headache and uræmic symptoms.

V. *If the pus be from an abscess bursting into the urinary passages*, its places of origin may be very various, some of them being: A. In rare cases, empyema. B. A tropical abscess of the liver. C. A psoas abscess. D. A prostatic abscess. E. Pelvic cellulitis after or independent of parturition. The urine is usually acid, and the pus falls as a creamy layer. Further, the diagnosis depends upon: 1, the clinical history previous to the pyuria; and, 2, the concomitant symptoms and signs of the primary disease.—*New York Medical Record.*

Contractures in Hemiplegia.—A hemiplegia (cerebral) quickly followed by contractures, nearly always quickly results in death. It is always a sign of cerebral hæmorrhage, sclerosis, or softening from embolic or thrombic occlusion. Hysteria must be eliminated in the diagnosis. In it contracture occurs suddenly, develops rapidly and varies frequently; facial paralysis is absent, but there is hemianæsthesia Finally the contractures (except in the oldest cases where organic lesion has developed) yield to anæsthetics.—*Cinn. Lancet and Clinic.*

BRITISH QUALIFICATIONS IN CANADA.

At the recent meeting of the General Council of Medical Education and Registration of Great Britain the question of Colonial registration of British qualifications came up for discussion. The following excerpt is from the *British Med. Journal* of July 26th :—

Communications from the Colonial and Privy Council offices, with legal opinions thereon by Messrs. Jenkyns and Ouvry, and an application from a Canadian practitioner, in regard to registration in Canada, referred to the General Council by the Executive Committee, were ordered to be received and entered on the minutes. Among the documents, was a petition from the College of Physicians and Surgeons of Ontario to his Excellency the Governor General of the Dominion of Canada, dated March 7th, 1879, asking him to submit the case of the petitioners, as set forth in their memorial, to Her Majesty's Government, and to recommend that those portions of the Medical Act passed by the Imperial Parliament which affect Canada and interfere with the rights of self-government and and self-legislation conferred upon her Parliament and the legislatures of her several provinces by the British North America Act (1867) may be repealed. Among the grounds of this request were the following.

"The effect of permitting persons registered on the *Medical Register* of Great Britain to register in Ontario without complying with the rules of your petitioners' Council will have a most harmful effect on the progress of medical science in this province.....Physicians and Surgeons are distinct professions in the United Kingdom, but, being registered in the *Medical Register* of Great Britain, a physician or a surgeon can, under the provisions of the Imperial Acts, register in Ontario, and so become entitled to practice in all branches of the profession in that province, although only licensed to practice in one branch in the United Kingdom. ....A number of diseases are necessarily treated differently in Canada and in the United Kingdom on account of differences, climatic and physical; so that, in the interests of the public, it is necessary for medical students and professional men to receive a practical medical educa-

tion in Canada, or undergo an examination as to the fitness to deal with such distinctive diseases....A grave injustice will be done to those institutions which resigned their licensing rights in favour of the petitioners if the qualifications of the various licensing bodies in Great Britain and Ireland shall, through the medium of the British *Medical Register*, entitle persons holding the same to practice medicine in the province....The Imperial legislation referred to is practically in opposition to the spirit of the British North America Act, which assumed to leave the people of Ontario to deal with their civil rights."

The petition was supported by a report of a Committee of the Canada Privy Council, which stated—

"The Committee cannot help thinking that these Imperial Acts" (the Medical Act of 1858 and the Act to amend the Law relating to Medical Practitioners in the Colonies, 1868 "were passed without the attention of Parliament having been called to the fact that they infringed upon the legislative powers conferred upon the provinces and the Dominion, and feel assured that on the subject being brought before the notice of Her Majesty's Government, steps will be taken for the repeal of the objectionable provisions. It is obvious that if the legislation be permissible with respect to the medical profession, it might with equal propriety be extended by the Imperial Parliament to every profession, trade, and occupation in Canada, and would thus be subversive of the rights of self government graciously conceded to the people of the Dominion."

The legal opinion of Mr. Jenkyns on the subject was to the following effect.

The petition of the College of Physicians and Surgeons of Ontario is based on an entire misapprehension of the law. The Act of 1858, which was in force at the time when the College of Physicians and Surgeons of Ontario was established, and when the Canadian Federation Act was passed, gave to practitioners registered in the *Medical Register* of the United Kingdom a right to practice throughout the Queen's dominions.

"The Act 31 and 32 Vic., cap. 29, relaxed the law in favour of the colonies by allowing a colonial legislation to require registered United Kingdom practitioners to be registered in the colonial *Register*, but it preserved the right of those practitioners by allowing them to claim registration as of right. Under this Act, if the Ontario legislature require medical practitioners registered in the United Kingdom to be registered in Ontario, the Ontario Registrar is bound to register them; but otherwise the Ontario Registrar is not obliged to register them, although unable to prevent their practicing without being registered....The Privy Council of Canada omit to notice that at the time the Act of 1858 passed, the Ontario College did not exist. Nor are the Privy Council correct in stating that the Act of 1868 is a greater interference with their self-government than the Act of 1858, because the Act of 1868 does not compel a colony to register United Kingdom practitioners, but authorizes a colonial legislature to do what it could not do under the Act of 1858—namely, require a registered United Kingdom practitioner to be registered in the colony. To preserve the rights conferred by the Act of 1858, it was necessary to provide that if the colonial legislature itself requires such registration it shall not take away those rights, and shall be bound to register such a practitioner without further examination. The interest of Canada would appear to be to maintain the privileges given by the Act of 1858, as, if the pending Bill passes, a holder of an Ontario diploma will be able to be registered in the United Kingdom *Register*, and thus be able to practice under his Canadian diploma throughout Her Majesty's dominions."

The documents having been referred by the President to Mr. Ouvry, for his opinion thereon, he stated that he thought the question might be left where Mr. Jenkyns had put it; that the suggestion of the Ontario College that English registered practitioners are not fit to practice in Canada was peculiar, especially as legislation was contemplated to admit Canadian practitioners here; that the Government must consider the matter as an Imperial question, affecting the relation of the mother country with her colonies; and that it would be a thing to be lamented if, from any action on the part of the colony, freedom to practice should be done away with or limited.

NITRITE OF AMYL IN CHLORAL-POISONING.

BY J. G. SINCLAIR COGHILL, M.D., F.R.C.P.EDIN.

The following case indicates so markedly the value of nitrite of amyl as an antidote in poisoning by chloral-hydrate, and otherwise presents so many other points of interest in connection with the symptoms produced by overdose of that now much used and much abused drug, that I have yielded to the request of some of my medical brethren to make it public.

A. B., aged 62, of spare habit, was a frequent and intense sufferer from gout, in seeking relief for which he had unfortunately become somewhat addicted to alcoholic stimulants and narcotics generally. Late on the evening of the 23rd of April, after a liberal potation of whiskey, he took a large, but unfortunately an unascertained dose of his favorite anodyne, chloral. The dose must have been a very large one, for within a very few minutes he became completely insensible. Fortunately, medical assistance being at hand, the case received immediate attention from the very commencement of the symptoms, which, however, became so alarming, that in about two hours I was sent for. I found that artificial respiration had been kept up for some time, but only with the effect of inducing feeble, superficial, gasping respirations, at the rate of four per minute. The surface was cold and deeply cyanosed, and the pupils strongly contracted to the size of a pin's head. The pulse, however, was 80, full, but soft and compressible. I had the tongue at once pulled forward, and maintained in that position with forceps. Taking the state of the pupils as an indication, and remembering Liebreich's theory of the decomposition in the system of chloral into chloroform, I immediately administered by inhalation from a handkerchief about twenty drops of nitrite of amyl. The effect was immediate. Within two minutes, warmth had returned, even to the extremities, and the surface had assumed the hue of health. Within ten minutes, the respirations had become much deeper, reaching nine per minute, and afterwards gradually increased up to twelve. The amyl had to be repeated in a smaller dose in about two hours, with permanent effect. At 9.30 next morning, the general condition was found to have improved somewhat, but there was no return of consciousness; and an attempt to give fluid nourishment by mouth had produced great embarrassment of breathing. I ordered an enema of brandy and Liebig's extract in arrowroot to be given, and repeated every two hours. After the second enema, the patient became quite sensible, recognized and spoke to those around him, and swallowed some food with little trouble. I saw him again at 6.30 p.m., when the water was drawn off normal in amount and quality. I am informed that he continued to improve until 9 p.m., when he suddenly started up as if from sleep, with staring eyes, threw up his hand, uttered a cry, and fell back dead. I am inclined to think this fatal result might possibly have been averted by a more copious and frequent stimulation *per anum*.

The principal points of interest to be noted in this case are the extreme contraction of the pupils; the intense affection of the respiratory, the complete immunity of the circulatory, system; the rapid recovery of warmth and colour, with restoration of the respiratory function under the influence of nitrite of amyl; the return of consciousness in response to stimulation *per anum;* and the sudden failure of the heart's action, which proved immediately fatal.

In cases of poisoning by chloral-hydrate, very opposite observations are on record with reference to the state of the pupils, and also as to the relative extent to which the action of the heart and lungs is influenced by the drug. Mr. W. Sedgwick, who has made a special study of the subject, states that in most instances the pupils are contracted; while Dr. Cleveland, and especially Dr. B. W. Richardson, report the contrary to be the invariable condition. I believe that the explanation of these apparently discrepant phenomena must be sought for in the difference in the amount of the drug swallowed, and the corresponding rapidity of its action. When chloroform is administered in excess *too rapidly*, it seems to prove fatal by paralyzing the respiratory centres, while the pulse remains comparatively unaffected, the

pupils being *contracted;* but when chloroform inhalation is kept up *too long*, so that the drug accumulates slowly in the system, the heart first yields to its influence, and succumbs earlier than the respiration, and under these circumstances the pupils will be found *dilated.* I have ascertained these conditions, both experimentally in the lower animals, and from a large experience of chloroform administration commenced twenty-two years ago, while assistant to the late Sir James Y. Simpson. A parallel discrepancy in symptoms may be noted also in cases of delirium tremens, where the phenomena of the attack have been developed as a result of prolonged drinking to excess, or from one deep debauch.

Liebreich, the discoverer of chloral-hydrate, believes that it acts on the system by being resolved into chloroform from decomposition in the presence of an alkali; and although this opinion is purely theoretical, yet it must be admitted that there are marked and close resemblances both in their physiological and therapeutic effects. This would at once explain why nitrite of amyl should be the best antidote in chloral-poisoning, much more certainly than strychnia, which has been proposed as its antagonist; while, strangely enough, nitrite of amyl itself is proposed by Dr. B. W. Richardson as the antidote to strychnia poisoning. May it not be that nitrite of amyl will prove the appropriate antidote when the drug has been administered in such quantity as to act rapidly on the respiratory centres, *with contracted pupils*, and that strychnia should be given when the drug has acted slowly as a cumulative poison when the heart has succumbed, *and the pupils are found dilated?—Brit. Med. Jour.*

TREATMENT OF HYPERTROPHY OF THE TONSILS. —QUINART.—In cases of non-inflaminatory hypertrophy of the tonsils, Dr. Quinart recommends massage of the hypertrophoid glands followed by alum gargles. The moistened index finger is plunged into powdered alum and is then carried directly to the tonsil to compress and malaxate it. This being done the patient makes use of an emollient or aluminate gargle, and at the end of two or three days he will be able to do the massage himself.—*L'Union Médicale.*

ON LEUCIN.

BY DR. JOHN C. PETERS.

In the article on Acidity in the April number of the *Physician and Pharmacist*, leucin is constantly spelled "lencin." The typographical error escaped the attention of the author, to whom the proofs were submitted, but it is supposed that any one at all conversant with the subject, readily made the obvious correction. Still, as this affords an excellent opportunity to say a few words more on the subject of leucin, the juncture will be taken advantage of to complete the subject.

We will follow Murchison, who is most clear upon the subject. In the first place, *urea* is found in various parts of the system, and largely in the liver, where its appearance is preceded by leucin and tyrosin, which are afterwards to be converted into uric acid and urea, which then are merely elimated by the kidneys.

This is noticed more particularly in acute atrophy of the liver, in which there is a great diminution, or else the total disappearance of of urea and uric acid from the urine, and also of the chlorides, sulphates and earthy phosphates, and the substitution of two new substances of a peculiar nature, viz., leucin and tyrosin.

These substances are products of the metamorphosis of nitrogenous matter, intermediate between the albuminous fibrin on the one hand, and uric acid and urea on the other.

It is well known that there is a great destruction of fibrin in the liver, which is converted first into leucin and tyrosin, and should be still further changed into uric acid and urea, in order to be cast out of the system by the kidneys. But this process is stopped in its first stages in the liver in acute yellow atrophy, and instead of urea and uric acid leucin and tyrosin, in their crystalline forms, are found in the tissues of the liver, spleen and kidneys, and are also excreted in large quantity in the urine, from which they separate as a distinct deposit on standing, or they may easily be obtained by evaporating a few drops of the urine on a glass slide. The detection of these crystalline bodies in the urine in a severe case of jaundice may be said to clinch and complete the diagnosis of acute atrophy of the liver.

To repeat, we may say that the albumen of the food is converted by the gastric juice into peptone, which is absorbed by the intestinal veins, and carried to the liver, where it is just decomposed into glycogen, leucin and tyrosin, which should be ultimately resolved into uric acid, and then into urea.

One of the most constant signs of functional derangement of the liver is an imperfect formation of urea, out of uric acid, evidenced by the deposit of lithic acid or lithates, and of a dark colouring matter closely allied to lithic acid in the urine.

This shows that leucin and tyrosin have been changed into uric acid, but its further conversion into urea has been checked.

In the several organic disorders of the liver, the formation both of uric acid and urea has been stopped, and leucin and tyrosin only have been made.—*Physician and Pharmacist.*

HOSPITAL MEDICAL REGISTRATION.

The value of the information that has already been derived from the accumulation and arrangement of vital statistics is in itself sufficient encouragement to call forth further good work in this direction. Our large hospitals, as museums and laboratories of clinical and pathological facts, afford a wide field to the statistician; but at present, in too many instances, these facts are little used for the furtherance of knowledge. The question of the general registration of disease has often been mooted; and, if ever public medicine is to be advanced by medical registration, the methods must be first organized in our hospitals, where the greatest facilities exist for carrying on such work accurately and effectually. The term "registration" is here used to indicate the systematic record and arrangement of the facts observed in the clinical and pathological examinations. Hospital cases, without registration, are like specimens in a museum unlabelled and uncatalogued; registration is the collection and arrangement of facts, and affords the opportunity for the application of the logical law, that phenomena which vary coincidently are connected by some line of causation.

In organizing and carrying out in practice a plan of registration, some general systematic supervision of the primary recording of the facts to be registered is obviously necessary. As the work of case-taking is largely carried on by clinical clerks, it is very desirable that special instruction in systematic case-taking, as distinct from clinical examination, should be given to students before undertaking this duty.

Each case, when completed, should have the diagnosis endorsed upon it; the primary disease, secondary conditions, and complications, being here epitomised, in order that each of these heads may be duly registered.

It is highly desirable and perfectly practicable to arrange an index of diseases. An abridged nomenaclature of diseases, or diseases and symptoms, being decided upon, the name of each day may be written at the head of a page, and arranged in alphabetical order; while vertical columns in the page are headed as "reference to case," "age," "result," "days in hospital," etc., these particulars in each case being entered on the same line, and one line devoted to each case. Such an index, if constantly posted up, would be of great value, giving a running account throughout the year of the statistics of each disease and reference to the notes of each case. The primary diagnosis of disease would be entered in the index; and secondary conditions and complications, or important symptoms, might be entered in red ink, thus indicating that they were not the primary disease. We trust that this subject will receive the attention it merits, as essential to the full use of the facts recorded in clinical and pathological work for the advancement of science.—*British Medical Journal.*

Chronic Ulcers and Eczema Cured by Galvanism.—Take a silver plate large enough to cover the patch or ulcer, attach it by a copper wire to a plate of zinc. Place a piece of lint over the ulcer and upon it fasten the silver plate by means of a bandage. Wrap the zinc plate in lint, kept wet in dilute acetic acid, and secured to the limb by a bandage. In a case reported, an obstinate ulcer became covered with granulations after the battery was worn three days and in six days was healed.—*N. Y. Med. Record.*

PROGNOSIS IN INFANTILE PARALYSIS.

In a clinical lecture delivered by Prof. Jules Simon (*Gaz. Méd. de Paris*, Jan. 11, 1879) at the Hospital for Sick Children, the following points regarding prognosis are worthy of notice. Generally speaking, this disease leaves behind it a greater or less degree of paralysis. In a well-marked case, which has lasted four or five weeks, the cure will never be complete. But this persistent paralysis should not justify us in always giving a grave prognosis. For, though it may be always apparent to the skilled observer, the paralysis may disappear sufficiently to escape the notice of all others, and in other cases it may be remedied by orthopædic apparatus. M. Simon considers that there are three periods in the malady, in which the prognosis may be given in different terms. Quite at the outset, it being impossible to foresee the result, prognosis must be guarded and general. Time is the main element in prognosis now. In the second period, more precision is possible in prognosis. If the paralysis tends rapidly to improve, the prognosis is not very serious; but if it persists and spreads, there is a fear of muscular atrophy, fatty degeneration, and consecutive deformity. If the paralysis is soon accompanied by atrophy, *i.e.*, in from ten or fifteen days to three weeks, cure is impossible, and deformity will remain; but if the atrophy comes on slowly, the disease will, at least to a great extent, get well. In other cases, we are in presence of the accomplished fact. The patient is seen in the stage of deformity of infantile paralysis; there is atrophy and shortening of the limbs or club-foot. But even in these cases much may be done to justify a not altogether unfavourable prognosis by the judicious use of orthopædic apparatus. The etiology of infantile paralysis is very obscure. It is rarely seen before the age of six months, or after three years. M. Simon has seen cases which began at the ages of 4, 7, 7½, and even 12 years; but these are exceptional. Sex appears to have no influence. The occurrence of dentition and diarrhœa have been credited with it; lastly, *cold*, and especially staying in a damp place, have appeared to M. Simon to have been the cause in some cases he has seen, so that there would seem to be a rheumatic infantile paralysis.

In 214 children under one year old, among whom 41 were within a month, and 17 within a day old, these last evinced the patellar tendon reflex very markedly. The Achilles tendon reflex was not fully brought out in all the cases of children within one year old; but the patellar reflex was marked in nearly all. The author thinks that this phenomenon is a reflex one, for the distinctness of the symptom decreased with advancing age; although, according to Soltmann, the excitability of the peripheral nervous system gradually increases. This increased excitability is compensated for by the decreased tendency to reflex phenomena. —*London Med. Record.*

The *Louisville Medical News* says:—"The question of fees for teaching does not concern the schools a whit more than it does the profession at large. No other circumstance has worked such fruitful evils as the miserable price which has been set upon entrance to the practice of medicine. It has seduced hundreds of young men from positions intended for them by nature—behind the plough, the counter, at the anvil or upon the shoemaker's bench, where they might have been useful members of society—to follow a seemingly easy path in life, but which, ten chances to one, in such instances leads simply to starvation or to quackery; and meanwhile the bread of deserving men is divided, and the title of doctor, which is given to deserving and undeserving alike, sinks in the estimation of the people. It is all the veriest balderdash, this talk about the honest and deserving poor, and their rights for a chance in life. Where one such suffers by proper fees, a hundred are kept from their ruin; and it is simply in charity that the entrance to what should be a learned and what is a slowly-rewarded profession should be above their temptation. When medicine is thrown open only to self-reliant men, such as are able to pay their way properly, no matter at what cost of self denial, or to those who have friends sufficiently interested in them to pay it for them, men with proper educational advantages will be most apt to enter its lists for a proper course of study.

Surgery.

THE CAUSE AND CURE OF PRICKLY HEAT.

BY G. H. FOX, M.D.

Lichen æstivus, or "prickly heat," an affec- which appears as a trifling affair to those who do not suffer from it, but is a serious affliction to those who do suffer, is too well known to require description. It affects both the rich and the poor, the old and the young, the robust and the weak, and occurs not so frequently after a single day or two of very hot weather as after a period of several days during which the thermometer keeps up almost constantly in or near the nineties.

Now that the heated term is rapidly approaching and a large proportion of a sweltering community is doomed to suffer more or less from this annual scourge, a few words respecting its cause and cure may be read with interest. The predisposing causes are prolonged and excessive summer heats, an injudicious diet and a disregard for cleanliness. The exciting causes are unnecessary clothing and perspiration allowed to remain upon the skin. The weather being beyond our control we can only seek to prevent as far as possible its debilitating effect. Much can be accomplished by "keeping cool" mentally, while performing deliberately whatever physical labour is indispensable. Frequent excursions can be made to sea-shore or country even by the poorest classes in our crowded cities, and nothing will prove more invigorating and prophylatic of prickly heat. Diet has a decided influence in predisposing to the affection. How some people can manage to go through July and August on a winter bill of fare and not suffer more than they do is a physiological mystery. When the appetite is dull, as is usual in hot weather, fruit and vegetables should be our chief support, and children showing a tendency to the annoying rash may be restricted with advantage to milk and a very light diet. As a daily beverage, lemonade taken very slowly and in small quantities at a time is a most desirable substitute for iced water. In citing uncleanliness as a predisposing cause I do not mean merely a lack of soap and water, since no amount of bathing will prevent the occurrence of prickly heat, but refer to that mistaken notion of comfort and propriety which leads some to discard flannels with the first approach of warm weather. Without a thin porous texture in contact with the skin no one can expect to be dry and clean while the idea that the friction of a thin merino undergarment can be the cause of prickly heat is a mistaken one. A superabundance of clothing is often an exciting cause of the affection in infants and young children. Fashion, which cruelly exposes youthful legs to the chill air of May and November, demands that babies, whether in July or January, shall wear a certain number of layers of clothing, and in the former month prickly heat is often the penalty. In adults clothing is often discarded when it should be worn—not with a view of keeping the body warm, but for the purpose of keeping the skin dry. A fleshy man or woman perspires freely, the linen or cotton worn next the skin becomes soaked by perspiration, and like a poultice induces a diffused congestion with follicular inflammation. Of flannel some observant sage has remarked that no matter how cold or wet it may be it is always dry and warm. Now when thin merino is worn next to the skin in the hottest weather, and especially when frequently changed, no sour perspiration can decompose upon the skin, macerating the epidermis, irritating the peripheral nerves, and giving rise to an unsightly and uncomfortable eruption.

From what has been said in the foregoing as to the causes of prickly heat it will be inferred that the chief end and aim of treatment is to keep the skin dry. Upon success in this respects depends both the prevention and the cure of the eruption. We cannot of course expect the community to abstain from perspiring during July and August, but we should urge the necessity of keeping the perspiration absorbed as fast as it is excreted, for no one with a perfectly dry skin will suffer from the eruption.

In a very obstinate case it is always desirable to inquire after and to regulate the diet and the clothing, but I have found that in the great majority of cases the eruption will disappear quickly under a routine treatment consisting

of an alkaline diuretic and an absorbent powder. Not to go beyond the resources of the household economy, I often recommend cream of tartar water to be taken internally and starch powder to be applied locally and in general, no better plan of treatment could be asked for.

In place of a weak solution of cream of tartar in water, a whey may be made by adding a half ounce to a quart of milk, boiling and straining out the curd ; or a pleasant effervescing drink made by adding a half teaspoonful of bicarbonate of soda to a half glass of lemonade. Other diuretics might be preferable in some cases, and oxide of zinc or bismuth might perhaps be advantageously used as a dusting powder, but I mention the cream of tartar and starch powder plan of treatment as being a very efficacious one, and perhaps the simplest and most available one in ordinary family practice.

Sometimes the skin may be so severely inflamed as to seemingly require some sedative or antiphlogistic lotion, but a cool bath and a little stimulation of the kidneys will immediately lesson the hyperæmia and check the intense pruritus. Lotions and ointments, though often of service, are rarely needed save in cases where the skin has been severely scratched or become the seat of a secondary eczema. A rule of treament which will invariably prove successful is to keep the kidneys active and the skin dry.—*Physician and Pharmacist.*

INCONTINENCE AND RETENTION OF URINE IN CHILDREN.

BY W. F. TEEVAN, B.A., F.R.C.S.

Surgical causes of incontinence are : 1. Rectal complaints, such as piles, fistula, excoriations. 2. Ascarides. 3. A tight foreskin. 4. Congenital insufficiency of the external urethral orifice. 5. A calculus impacted in the urethra.

If the relation of the calibre of the external orifice to the general urethra be disproportionate the result is that the urine cannot escape as fast as it ought to do, and irritation is set up in the peripheral extremity of the nerve, which disturbs the vesical centres.

If a stone has just entered the meatus internus, it will be firmly and accurately embraced by the sphincter, and cause retention. If, however, the stone advance half an inch further, incontinence will be the result, for the calculus will then act as a gag and prevent the sphincter from closing, and the urine will dribble away along the sinuosities of the stone. In cases of incontinence where a surgical cause cannot be elucidated, when the complaint is only nocturnal, belladonna, or sealing the meatus externus with collodion at bed time is most useful. In diurnal incontinence strychnia is indicated. Blistering and an exclusive milk diet must not be neglected. If all other means fail, the application of a mild solution of nitrate of silver to the neck of the bladder is justifiable. Retention of urine in children is usually due to (1) congenital contraction of the meatus externus ; (2) phimosis ; (3) stone.

A small incision suffices to remove the cause. It is important to keep the enlarged orifice patent by a plug of oiled lint. In phimosis the indication is of course to incise or dilate.—*London Lancet.*

THE HYPODERMIC USE OF CARBOLIC ACID IN PILES.—Prof. E. Andrews, M.D., of Chicago, says, in the Michigan *Medical News* :—The evidence in my hands points to the conclusion that if the following rules be observed the hypodermic injection of piles is less painful and fully as safe as any other operation. 1. Inject only internal piles. 2. Use at first only one part of carbolic acid to twenty parts of the excipient, and stronger solutions only when these fail. Inject only two to four drops at first, and repeat with larger doses if needed. 3. Inject very slowly, smear the parts first with unguent, to protect them from accidental dripping, keep the pipe of the syringe in the pile for a few moments, until the fluid becomes fixed. 4. Treat only one pile at a time, and allow from four to ten days between the operations. 5. Dangerous hæmorrhage has occurred, as in other operations, from the patient proceeding at once to active exercise. He should be confined to bed the first twelve hours, and returned to it subsequently if the parts inflame much or the pile suppurates or mortifies. This great western epidemic of pile doctors is one of the most interesting events in the history of surgery, and seems to have resulted in the addition of a really valuable improvement to our resources.

TREATMENT OF LUPUS BY SCARIFICATION.

Dr. Lelongt, in his thesis upon the pathological anatomy of lupus and its treatment by linear scarification, compares the merits of this method of Vidal with those of the treatment, by scraping, of Volkmann. Dr. T. Veiel was the first to employ the former method. Dr. B. Squire has conjoined both with advantage. Vidal adopts Veiel's method with good success. It does not prevent relapses; it does arrest the course of lupus, and cause its disappearance in a comparatively short time. The skin is locally anæsthetized; then, with a needle like a cataract needle, linear parallel incisions are made as close to each other as possible. Similar cross-cuts are then made, leaving the skin divided into lozenges about 2 mm. broad. These incisions must penetrate the whole thickness of the skin, a rule which it is easy to observe, as the sound and diseased tissues differ markedly in consistency. The whole surface is to be thrown off, so there need be no fear of making too many scarifications. Hæmorrhage is inconsiderable. Iodoform is then every morning powdered upon this cut surface, which cicatrizes in a week, when the process may be repeated. Every lupus nodule requires, on an average, six or seven such scarifications. The scar is flat and slightly depressed, and its redness gradually diminishes. The dermatologist must be ready to repeat the operation the moment signs of a relapse appear. Dr. Lelongt thinks that the subacute inflammation set up in the neoplasm destroys the old, or possibly segmenting, cells, while the embryonic ones with the connective tissue are stimulated to the formation of a cicatrice. This method is adapted to ulcerative and to erythematous lupus. Large surfaces must be treated by small, distinct islands, one at a time, which should be at first in the periphery of the patch, thus arresting more speedily the progress of the disease. This method, as well as that of the curette, have each their advantages; the latter, however, would seem preferable for hypertrophic lupus or where the formation is considerable. The cases in which each is superior can only be decided in due course of time, when the relapses and cicatrices have been more studied.—*Archives of Dermatology.*

PARTIAL DISLOCATION OF THE FOURTH CERVICAL VERTEBRA DUE TO MUSCULAR ACTION.

BY JOHN A. WYETT, M.D.

On the morning of March 7, I was summoned to see a lady, who, I was told, had injured her neck. The history of the accident was as follows: In the act of bathing, while standing with her neck twisted, (the face being turned sharply to the left) she had lifted the right forearm and hand over the right shoulder, and was sponging herself between the scapula. While in this position she was seized with sudden and intense pain in the neck, more especially the right side. On arriving, about thirty minutes after the accident, I found her suffering intensely; the neck was twisted to the left and immovable, and the face turned and looking over the left shoulder. Her left hand was grasping the right side of the neck over the fourth cervical articular processes. She complained that she could scarcely breathe, and that there was a painful numbness running down the right arm. On running my finger down along the processes of this side, I found there was an intense pain on pressure at the junction of the right articular processes of the fourth and fifth vertebra. Seizing the head, I carefully attempted to rotate it to the right, but the entire body turned with it. Feeling confident that there was a dislocation forwards of the fourth articular process of the right side, upon the fifth, I seized the head from behind, on both sides, placing each hand with the thumb under the occiput, and the fingers under the jaw and chin, and turned the head slightly to the left, then made strong extension and rotated to the right. The head turned into its position without any trouble, and the pain instantly ceased. I moulded a shellac splint on the right side of the neck, and over the shoulder of the same side, and threw a figure of 8 roller around this shoulder and the neck. During the next two days there was considerable pain in the right arm and side, and along the track of the cord, which was relieved by morphine.

The patient recovered fully in a week, and has not since suffered. It is now more than three months since the accident. Dislocation

of the vertebra, without fracture is in itself a rare accident, and a simple displacement by muscular contraction has, as far as I am informed, not been reported. I am fortified in the correctness of the diagnosis in my case by the following facts:

1. There was complete fixation and immobility of the neck, which was relieved by the successful reduction.

2. Interference with respiration, showing that the filaments of the phrenic nerve were pressed upon. Pain in the arm, due to the pressue on those filaments of the fifth nerve escaping from the fourth vertebral foramen, which join the brachial plexus. Pain in the track of the cord, due to the slight pressure it received from an incomplete dislocation of the vertebra. Entire disappearance of these symptoms at the moment of reduction.

3. That there was no fracture, was evident from the absence of crepitus and the rapid recovery. The symptoms could not have resulted from rupture of muscle or tendon, because it would not have rendered the neck immovable, nor would the pain have disappeared so rapidly in case of rupture, where there would have been more extravasation and consequently more material for absorption.—*The Hosp. Gaz.*

Aphorisms on the Nature and Treatment of Gonorrhœa.—Dr. Louis Bauer lays down the following, in the St. Louis *Clinical Record*:—1. Gonorrhœa is indisputably a local disease. 2. The cause of gonorrhœa is local also, and of ephemeral duration. 3. Gonorrhœa is inflammatory in character, and if not disturbed by stimulating treatment, limited to the anterior portion of the urethra. 4. Primarily gonorrhœa affects the mucous membrane only. 5. Whatever may be the primary disintegration of the urethral lining by gonorrhœa, the structures involved are endowed with the power of spontaneous repair, that is to say, the reproduction of epithelium. 6. The reason why the erythematous inflammation of the urethral canal deserves special consideration and treatment is its special function to serve as an aqueduct for a saline fluid (urine). 7. The only rational indications for the treatment of gonorrhœa are: *a*. To protect the raw surface of the mucous membrane against contact with urine. *b*. To dilute the urine by frequent bland beverages, warm (alkaline) baths, and the like. *c*. To reduce the inflammation and the hyperæsthesia of the nerve papillæ.

Midwifery.

OVARIAN MENORRHAGIA.

BY ALFRED MEADOWS, M.D., LOND., F.R.C.P.

* * * * * * *

L. F., aged 23, had been married four years, but was never pregnant. Her catamenia began at thirteen, and at once continued every three weeks, being very profuse, and lasting for seven or eight days. Since marriage they had been even more profuse, and had also been accompanied by a good deal of pain.

I would here remark that such a history as this at once suggests to my mind ovarian troubles. From the very commencement of what I may term the ovular life of this woman, there was an abnormal element about it. Her menstrual periods, in other words, her ovulation, occurred much too frequently, and the effect upon the uterus was shown by an exaggeration of the menstrual discharge. Then again, when, by reason of her marriage, her sexual functions were stimulated, ovarian activity was yet further increased; and now, for the first time, pain was added to the history, and the uterine discharge was still further increased. Thus far, then, clinical history and physiological and pathological teaching went hand in hand. Now let us see what the physical examination revealed.

The cervix uteri was situated rather posteriorly in the pelvis, and somewhat more to the left side. This latter displacement seemed to be caused by a swelling of the size of a hen's egg, situate in the region of the right ovary. On the left of the uterus, a similar but smaller swelling was felt. Both these swellings were extremely tender to touch, and they presented a kind of cystic feel. In fact, they were evidently enlarged and inflamed, or at least swollen and congested ovaries; so that here again the facts corroborated the theory contended for, especially as the uterus itself was perfectly healthy.

Lastly, as to treatment. Thirty grains of the bromide of potassium and one drachm of the syrupus ferri bromidi were given three times a day. Locally, a pessary containing one grain of the alkaloid conia, and one-twelfth of a grain of atropine was ordered to be inserted

into the vagina every night. Under this treatment, steadily persevered with for three months, with occasional slight modification, and sometimes suspending it altogether when constitutional symptoms supervened, the patient vastly improved; the ovaries assumed nearly their normal size, the catamenial discharge greatly diminished, and, instead of menstruation recurring every three weeks, the intervals became fully three and a half weeks, while all pain disappeared. Thus, also, in treatment, unmistakable proof was afforded of the soundness of the pathology; and where this is the case, if it be also based on an accurate appreciation of physiological action, success in treatment is, I would almost venture to say, a moral certainty.

Let me now say a few words as to the treatment of these cases of ovarian menorrhagia, as exemplified in the foregoing illustration. I do not think I at all exaggerate when I say that, in ninety-nine out of every hundred cases of menorrhagia which come before the practitioner for treatment, his first thought is, what form of astringent shall I give? And the answer probably in most cases will be, an astringent chalybeate—either the perchloride or the pernitrate, or some similar preparation of iron, will be almost certainly prescribed. No wonder that such routine practice frequently fails; for as I stated at the beginning of my paper, a very considerable number of cases of menorrhagia which come up for treatment are of the kind which we have been considering, and for such as these, the persalts of iron are worse than useless; their only effect will probably be to still further force on ovulation, and thus to aggravate the complaint. Indeed, if the pathology which I have sought to enforce in this paper has any basis in reason and fact, then to adminster astringents in any form is surely unscientific; it is, as it were, beginning at the wrong end; it seeks to curtail capillary action at the uterine end of the pole as it were, whereas in reality, the mischief is being wrought at the ovarian end; and our treatment, therefore, ought to be directed to this point. In other words, we should disregard the result—the menorrhagia, and we should concentrate our attention upon the cause—the ovulation. Hence the remedies ordered in the above mentioned case, and hence the successful issue.

Of all drugs in the *Pharmacopœia*, I know of none which possesses such great power as the bromide of potassium in controlling this particular form of menorrhagia. I ought rather to say, for that better expresses my meaning, that no other drug possesses in a like degree the power of limiting ovulation. I believe, indeed, that we may absolutely suspend the function altogether, and produce in time an atrophy of the ovary by the prolonged administration of this drug in large doses. I have seen cases again and again in which menstruation, and therefore ovulation, has been delayed for weeks from apparently no other cause than this; and I have successfully arrested and cured scores of cases of this form of menorrhagia without ever giving any kind of astringent, but merely administering the bromide of potassium. Occasionally, but by no means always, I combine with it the bromide of iron. This drug seems to me to possess a somewhat similar action; certainly it does not act in any way as the other salts of iron. It seems to favour the absorption of certain glandular swellings, which cannot be said at least of any persalt of iron. Sometimes I give the iodide of potassium, and sometimes the iodide of iron, in conjunction with the bromides. I believe that they all act very much in the same manner; but certainly none are so efficacious as the bromide of potassium. Indeed, I may say it is my sheet anchor in these cases, and I regard it as almost, if not quite, a specific in ovarian menorrhagia. What its special mode of action may be, I fear I cannot with certainty divine; there is, indeed, nothing more difficult to define than the exact *modus operandi* of drugs; but I would at least venture to state my conviction that this drug acts directly through the nervous system, and especially upon the nerves of the blood-vessels. In this way it is, I believe, that it exerts so beneficial an influence in cases of epilepsy; and it seems to me not unlikely that the good results wrought in those cases of epilepsy in women, which occur so frequently in connection with menstruation, are due directly to the influence of the bromide in controlling ovulation and so diminishing this form of reflex irritation.

In connection with the hypothesis here stated as to the *modus operandi* of bromide of potassium upon the nerves of the ovaries, let me refer to the other part of the prescription given in the case above detailed. The two alkaloids —conia and atropia—were ordered to be used *per vaginam*. You will remember that pain became a prominent symptom in this case after the patient married ; and I have just stated my belief that the bromide acts beneficially upon the local nervous system. It would seem, then, if this be therapeutically sound, that we ought to seek to influence nervous action in order to control ovulation. And this would appear to be specially necessary where pain was also a prominent feature. Now, of all the anodynes we possess, none, I think, can compare with conium as an anodyne to the generative or sexual organs ; and its influence upon the ovarian nerves is quite remarkable. I have even thought, from observations I have made, that it not only allays pain, but that it also calms vascular excitement, and so exercises a controlling and moderating influence even upon ovulation itself. Nor does this seem unreasonable or unscientific, when we consider how much vascular activity is influenced by nervous excitement. At all events, I am satisfied that it does exercise a most beneficial effect in the class of cases we are considering. Atropia or belladonna seems also to possess similar powers, but by no means to the same extent ; and it has the disadvantage of causing sometimes serious constitutional disturbance even in small doses. Moreover, with an agent so efficacious, and I may add so uniform, in its results as conium, we need not multiply our resources. I may say that I always use the alkaloid *conia* in one-grain doses for a pessary, just as I prefer atropia to belladonna, because the alkaloids are cleaner in use, do not create any dirty-coloured discharge, are smaller in bulk, and are certainly not less effective.—*British Medical Journal.*

Sign of Death.—Three hours after death, every trace of faradic muscular irritability is found to have disappeared, and the most powerful current will remain absolutely ineffectual ; in suspended animation the muscles respond freely to a current of moderate force.

Original Communications.

SMALL-POX IN ONTARIO.

FROM 25TH OCT. LAST TO DATE.

BY A. A. RIDDEL, M.D.

[Read before the Toronto Medical Society, June 26th, 1879.]

(*Concluded.*)

24. Nov. 30. The keeper of the boarding-house in which No. 1 had boarded. He was under homœopathic treatment, medicinally and otherwise, except with respect to the face. He was 64 years of age ; said he had been vaccinated when young, and had had the small-pox while in the army. The room in which he lay was not more than 7 by 11, dark, close and filthy. He had diffuse varioloid. In order to prevent pitting of the face of this grey-headed old man a mixture of lard and charcoal was thickly smeared over it. To my surprise, I saw a notice of his death in the papers a few days after, and feel satisfied that his death was not caused by small-pox, but by the poisoned atmosphere of his room, and the want of proper care, cleanliness and suitable nourishment.

25. Same date. Called to visit a girl of 17 on Osgoode Street. She had been servant in the family of Nos. 16 and 18, and had simple varioloid. Vaccinated.

26. Same date. A sturdy man of 28, a street-car conductor, admitted from Yorkville, in third day of semi-confluent varioloid. He was a constant visitor at the house of No. 5, already notorious. Vaccinated, but cicatrix not well marked.

27. Dec. 12. A girl aged 11, on Richmond Street East, with diffuse varioloid. Vaccinated, a sister of 39.

28. Same date. A young married woman in same house, with mild varioloid. She had given birth to a puny child at eight months, twenty days before. Vaccinated. I vaccinated the infant, and it escaped the disease.

The source of their infection will be shown in No. 39.

29. Dec. 13. Was called to attend a woman on Coatsworth Street, in labor with her second child. She was a sister of No. 26. Child born and placenta extruded before arrival. The child was at about eight months. She had had a comparatively painless and quick labor. As on a former occasion I brought this case before the Society in detail, it need not be much dwelt upon here, still, some few points may bear repetition, especially as some of the members present this evening may not have been at the meeting at which the case was read. The woman's face was flushed, eyes suffused, the pulse 120 and small, with

great restlessness. Knowing that her brother was in the Small-pox Hospital, I thought it probable that she might have seen him before his admission, although their residences were some three miles apart. This suspicion, coupled with the fact that I had seen at least two similar cases in epidemics of small-pox, led me to ask if she had visited her brother during his illness. She replied that she had spent a quarter of an hour with him on the 29th of November, the day before his conveyance to hospital. Grounded upon these circumstances, malignant small-pox, with a fatal termination, was diagnosed; and the following mixture was prescribed: ℞. Acid salicylic gr. xv., ammon carbon. and sodæ bicarb. āā. gr. v., glycerini. M. xv., in half an ounce of water, every four hours. The child died that night. Before leaving I informed her husband of my opinion. Next morning she upbraided me for having said that she had small-pox; and stated that she had been vaccinated when young, and had had the disease in the old country. There were a few miliary papules on the cheeks and forehead, flushed face, pain in head and back; pulse same. On the 15th the face was still flushed, but the papulæ had almost disappeared from the face. They were plentiful, however, on the legs; and the neck and upper part of chest were the color of cherry wood, with some vesicles along the borders. Pulse 128, and very small; delirium at times, violent jactitation. By the 17th all the eruption had disappeared; but the low delirium, small and frequent pulse, jactitation, and odor of the body and breath, indicated too plainly what the result would be. She died next day.

30. Dec. 23. Application for the admission of a young woman, aged 20, from Sackville Street. The van was sent for her, but it being an open one, and the day one of the coldest of the winter, her father would not allow her to be removed. She was taken to the hospital, however, on the 6th of January following, with a sister. She had confluent over the entire body. Vaccinated.

31. 1879, Jan. 3. Admission asked for a sister of the above, aged 7; but when the van reached the house, some two hours after, she was already dead. She had first complained less than forty-eight hours before; and it is probable that passive congestion of the lungs had early set in, as it was stated that "she could hardly get her breath." Vaccinated.

32. Jan. 3. A young man, aged 24, died of confluent about this date, on Spadina Avenue. He was not seen by me. The day of his death I was requested to visit him, but declined unless in company with his medical attendant.

33. Jan. 6. A girl aged 18, admitted from the house on Sackville Street referred to in 30 and 31, with diffuse varioloid. Vaccinated. As No. 30 was still in a critical condition she was removed to hospital with her

34. Jan. 13. A brother of above, aged 16, in first day of what promised to be simple varioloid. It proved, however, a case of confluent. Vaccinated.

35. Same day. A brother of above, aged 14, admitted with fever, pain in back and head, vomiting, small and irregular pulse of 120, and a few fine papillæ on forehead. Next day the papillæ covered the entire body, and they were of the to-be-dreaded lead-like color, becoming purple by the following day. He was very ill till the 17th, when the alarming symptoms abated, and he gradually convalesced. Vaccinated.

36. Same day. Another brother, aged 9, with a light form of varioloid. Vaccinated when young, and re-vaccinated three weeks ago

37. Same day. Another sister, aged 4, with simple varioloid. Had not been successfully vaccinated.

This really afflicted family was motherless, and consisted of the father and seven children. One child died at home, and the six others were removed to hospital. It was not known how they had contracted the disease.

38. Jan. 18. A married woman, aged 29, admitted from York Street. Pulse small and 100. A tickling, irritating cough, caused by the back part of mouth being studded with papillæ. The face was covered with purplish papillæ; and the arms and legs with ordinary ones. Insomnolent. Nausea. Menstruating two weeks before her regular time. 20th. Delirious, the eruption becoming more general, and assuming a darker purple. Malignant. Same day, 7 p.m., sent for. She had been furious and unmanageable, but was then sleeping, a ¼ gr. morphia having been given at 3, and another at 6. 21st. Pulse small, and 108. Two more ¼ gr. morphia powders had been given during the night; and quiet, refreshing sleep had resulted. Stimulants, carbonate of ammonia, and milk were freely given. 22nd. Pulse 130, small. Had had two motions, from a purgative taken last night. Did not sleep; is drowsy, and delirious at times. The dark purple color is fading. A number of dark blood bullæ on different parts of the body. This is not unusual in such cases. 23rd. Speaks with difficulty, and in a whisper. 24th. In about same condition. Jactitation. Had a bath at 104° Fah. From this time forward she improved; but was troublesome, fretful, and hysterical, and had an attack of diarrhœa. She left hospital on 1st March.

39. Jan. 21. A girl aged 13, sister of No. 27, admitted in fourth day of confluent. On

the 23rd the pulse was 124, and very feeble, the eruption coalesced, flattened without filling, and the depressions were of that leaden hue noticed in bad cases of confluent. There was another unfavourable symptom here, which has not been previously referred to ; and which, though not always a sure precursor of death, is sufficiently alarming ; and in most cases of severe confluent is of evil omen. I allude to the cracking and peeling off of the cuticle in large patches, exposing an angry, raw-looking and bleeding surface. She had toward the end that difficult and painful deglutition thought to depend upon, ulceration of the fauces and contiguous parts, and died on the 26th. Vaccinated when young.

40. Feb. 12. A man aged 32, a tramp, from Brampton gaol. He was carried twenty-four miles in an open sleigh on the most bitter day of the winter. He had confluent in the fourth day, of that purple color indicative of the malignant type, and the respiration was of that short character implying broncho-pneumonia. Pulse 130, and small. He was placed in a warm bed in a room of 75°, and stimulants plied without stint. Next day his symptoms were not so alarming, his condition on entering hospital having been doubtless aggravated by the long cold journey. He nevertheless exhibited during his illness many of the worst symptoms noticed in such cases. In addition to the broncho-pneumonia, there was delirium for ten days at least ; he was at times morbidly melancholy ; at others, wild and unmanageable ; passed his fæces in bed ; and by the ninth day after admission a mass of apparent putridity. The prognosis was from the first unfavourable. Even after he had been allowed to get up the bronchial affection was exceedingly annoying. He continued frail and unpromising for some weeks ; but finally left the hospital on the 14th of April, at his own request, and a month earlier than he should have left it Not vaccinated.

41. March 18. A widow, aged 32, admitted from Yorkville in fourth day of semi-confluent. This case might in truth be designated confluent, as it really was in many parts of the body. But the ripening of the pustules on the nose on the sixth day after the appearance of the papillæ, and those on other portions following a somewhat similar abortive course, showed that her vaccination still protected her to a great extent. It was well that such was the case, as her frail constitution, coupled with a fretful, melancholy temperament, greatly aggravated her condition ; and, had the attack been a really serious one, she would in all likelihood have fallen a victim. Vaccinated.

42. May 6. A female child, aged 19 months, admitted from Bathurst Street, in the third day of confluent. She was recently from Montreal, where she had been exposed to the contagion. It was a favourable case throughout, without complication of any kind. Not vaccinated.

Of these forty-two cases two were from Yorkville. One (26) of these was known to have contracted the disease in Toronto, and the other (41) may reasonably be supposed to have done so too, as there was no small-pox otherwise than as above stated in that village during the winter, and her residence was not thirty feet from the north side of Bloor Street. A third (40) was from Brampton, and it was not known where he had been exposed. Deducting these three, leaves but thirty-nine in the city proper, from the 25th of October last to date. It is not altogether improbable that there may have been a few others whose true character escaped notice, and some may have been designedly kept from the knowledge of the health officers.

Of the thirty-nine reported city cases twenty-five were removed to hospital, making, with the two from Yorkville and one from Brampton, twenty-eight, with five deaths. Of these twenty-eight, after deducting those that might be considered in any way as doubtful, there were at least eleven genuine confluent, in a few of which there were some symptoms of malignancy ; and two (19 and 38) may be fairly claimed as malignant.

Of the fourteen cases not removed to hospital, three (11, 18, 32) were confluent, and two (29, 31) malignant. All five died, but one (31) had no medical attendance whatever.

It is exceedingly difficult to trace out historical facts in diseases like small pox, where the period of incubation is so prolonged. No one can imagine the trouble and labour it has cost me to elicit the few relating to the introduction of that disease into, and its spread in, our city during the recent quasi-epidemic that are now laid before you ; and no one can regret more than I do that the information now offered is so scanty. In addition to the transmissions traced out, many whose history could not be ascertained were doubtless smitten by the original introducers of the *contagium*, or their immediate descendants.

In going over this report it will be noticed that No. 1 gave the disease to Nos. 9, 14 and 24 ; No. 4, directly and indirectly, to Nos. 5, 6, 7, 8, 10, 15, 17, 20, 23, 26, 29 ; No. 11, to Nos. 12 and 21 ; No. 13 to 16, 18 and 25 ; and No. 26 directly to 29.

One more case of transmission I have reserved to the last, because it is the only instance known where a patient leaving the small-pox hospital completely cured, and with his clothes and person well washed and disinfected, has

conveyed the disease to outside parties. It will be remembered how positively No. 8 was accused of having given the disease to numerous persons at the house on Richmond Street West, kept by No. 5 as a boarding-house, when he was certainly innocent. It will be conceded after what I am about to state, that he richly merited all the abuse bestowed upon him, it having proved but punishment in advance for offences committed by him subsequently. He had but mere rags of clothes when he entered the hospital, and I tried to obtain a new suit for him from the Board of Health when he was leaving, but in vain. On being discharged from hospital he is said to have carried away infected articles of apparel of trifling value, and with these in his possession went to board at the house in which the cases 27, 28 and 39 subsequently presented.

On the 8th December last I was called to attend a little girl of about five years, on Don Mount, with confluent. She had not been vaccinated. There were three other children in the family, all of whom I at once vaccinated, as up to that time they had been neglected. The little girl had a hard time of it, broncho-pneumonia complicating the case. She recovered. On the 20th a brother, aged 7, took ill, and had confluent of a mild type, the vaccination having most likely been serviceable.

On the 16th of same month I was summoned to visit a young man at Flesherton, with confluent. He recovered. Vaccinated when young.

In not one of the above three cases could the history be obtained.

On the 18th of February last I was called to attend a young woman, aged 16, with confluent, at Weston; and on the 20th an elder brother was taken ill with the same type. Both died. Not vaccinated. The family consisted of the father and mother, a daughter of about 20, and an adopted female infant. I vaccinated the father, healthy daughter and infant. The mother had had the disease. The infant subsequently had a very light form of varioloid, and so also had the old lady. The disease was supposed to have originated in the shoddy mill, where those first attacked worked, especially as it was somewhat widespread among those employed at the mill about two years before. Rags from all parts of Lower and Upper Canada are sent to this mill, and it would not be at all strange if remnants of articles of clothing worn by small-pox patients were sometimes consigned to it.

Congenital Absence of the Spleen.—Dr. Koch in *Berliner Klin. Wochen*, reports that at the autopsy of a man aged 49, the spleen was found to be entirely wanting.

CYSTOCELE — SUCCESSFUL OPERATION BY THOMAS'S METHOD.

BY G. W. EMERY, M.D.

Physician to "Bethany Home," Minneapolis, Minn.

History.—Mrs. E. M. C., aged 55 years, widow, had, at the age of 15 years, while jumping, fallen upon a knotty chunk of wood, a prominent part of which entered the genital organs per vaginam, producing an internal wound which bled very freely, leaving what the patient described as a mass of flesh protruding from the vagina which she cut off with a pair of scissors. She was then residing in a rural district in Central New York, and at such a distance from a physician that the family neglected to summon any aid. She was confined to her bed for two or three weeks, and from the description of her suffering, as now given, I incline to the opinion that she ran through an attack of cellulitis, from which she slowly recovered and became enabled to work at domestic duties, but says she always suffered more or less with difficult and painful urination. She married at the age of thirty-eight years, a farmer, with whom she lived to the time of his death without issue, a period of ten years. She was employed nearly two years ago as matron of the Bethany Home Institution, but after a few months her physical condition compelled her resignation. In January last she placed herself under preparatory treatment for an operation. She had complained of *falling of the womb*, and had been informed that this was her condition by a number of physicians with whom she had consulted.

Upon my first examination, 11th January last, the following conditions were present: Bladder projecting through vulva, and distended to nearly the size of a tea-cup, this upon the patient taking the prone position could, with difficulty, be returned into vagina by taxis, and upon assuming the erect posture the organ would immediately become dislocated and protrude. Urine accumulated and increased the deformity, and micturition was only performed after the patient would press the organ up into the vaginal canal, and then was always accompanied by intense tenesmus. The uterus was atrophied and seemed to be about

the size of an English walnut, and high up in the pelvic cavity. Examined patient the next day with Dr. Mary G. Hood, and found a sinus about three inches, posterior to or above the meatus urinarius, leading into a prolonged membranous canal, about two inches in length, up to the above described uterus, which was entered with considerable difficulty, as the axis was completely opposite to the normal condition, and required the applicator to assume the shape of a fish-hook, a condition never before met with in my practice, and which I considered was produced by an amputation of the neck of the organ when the injury was received, and which was completely removed by the patient with the scissors, it (the tissue) hanging externally soon after the injury as detailed in the history of the case. The preparatory treatment consisted of ferruginous tonics, generous diet, and anodynes, to allay a troublesome and old standing cough, the result of chronic bronchitis. The patient was also removed from the Home to the Cottage hospital for operation; where, on the 28th of February, assisted by Drs. Hood, Hutchins and Kelly, I performed Thomas's operation, using the clamp and separator, removing a triangular fold of the vagina two and a-half inches long and one and a-half inches in width at base. The tissue removed was one and one half lines in thickness, and was separated from the bladder with great difficulty, which I concluded was due to the cellulitis. The time of operation was one hour and ten minutes. The anesthetic used Squibb's ether. The operation was followed by severe and continuous emesis for thirty-six hours. Patient much depressed; pulse 136; tongue temp. 100. Used catheter three times daily till the 8th March, when patient took the normal attitude and urinated without pain or difficulty for the first time in thirty-seven years. The clamp was removed in forty-eight hours, and the sutures in eight days. Patient was then changed to another and colder apartment; and a severe change of temperature occurring on the same night of removal she was attacked with double pneumonia, which increased the cough and thereby produced such straining as to tear open the wound near the os, and necessitated an additional operation which consisted in paring the edges of former wounds, and inserting fresh sutures. This operation was performed on the 26th March, with the assistance of Drs. Hutchins, Dunsmore and Myers, the patient being placed in Sims' position. The difficulty of the operation consisted in the hemorrhage, which was quite severe, and for which hot water 110° was used freely. One inch of additional tissue was dissected from the vaginal wall at the separated sides of the former wound, and the lips of the wound were brought in apposition with four sutures. The patient rallied rapidly and was enabled to leave the hospital about the middle of April. Soon after she was prostrated by an attack of rubeola, with its accompanying pulmonary irritation, and I feared my patient must succumb; but under the assiduous care of my partner, Dr. Lamb, she rallied, and is now up and enabled to walk several blocks, and is entirely free from cough, and the cystocele radically cured.

ANTISEPTIC SURGERY—COMPOUND FRACTURE OF TIBIA WITH DISLOCATION AT ANKLE, AND COLLES'S FRACTURE OF RADIUS.

BY JOHN A. MULLIN, M.D., HAMILTON.

C. M., aged 28, carpenter, robust, and has generally enjoyed good health; family history good, except that a brother died from Bright's disease; patient fell from a building from the height of 24 feet, May 26th, 1879; the tibia was fractured two inches above the ankle-joint, obliquely, the line of fracture downwards and outwards. Immediately after the injury the foot was found displaced inwards, with a transverse wound of the integuments an inch and a-half in length just below the internal malleolus; the ligaments were ruptured permitting the malleolus to protrude through the wound to the extent of an inch. The finger was passed through this wound into the ankle-joint. There was emphysematous crackling about the ankle and half way up the leg over the tibia, the soft parts having been lacerated by the lower end of the upper fragment of the tibia, permitting the entrance of air to the seat of the tibial fracture. Parts about the

ankle bruised and swollen. The fractured radius pressed against the integuments almost rupturing the skin immediately above the wrist; there were marks of bruises about the pelvis though no fracture except of the bones mentioned. The injuries were received at mid-day, and the fractures dressed temporarily by two surgeons, so as to allow the patient to be taken to his house. In the afternoon I took charge of the case, and at five o'clock, assisted by Drs. Malloch and James White, the patient was chloroformed and the following treatment adopted: A soft rubber catheter was passed through the wound below the fibula upwards and inwards to the seat of fracture of the tibia, and a watery solution of carbolic acid, one to twenty was injected through the lacerated structures, being pressed as far as possible in the direction where the crackling was felt; a counter opening was made over the tibial fracture, and the water injected pressed through this wound. The foot and leg, half way up to the knee, were wrapped in antiseptic gauze, and spirits applied, a spray of watery solution of carbolic acid from a steam spray apparatus having been used during the time of dressing. A good deal of bleeding had occurred; pulse 80, temperature normal. Vomited in the evening.

May 23rd. Pulse 100, temperature 99½; vomited once this morning; rested well; leg gave very little pain; dressings removed under the protection of the carbolic acid spray from the steam spray apparatus. There had been a good deal of discharge, bloody, but free from signs of decomposition. Dressings were reapplied, using the same antiseptic precautions as on the day before.

May 24th. Pulse 100, temperature 99¾; dressings removed from leg; less discharge, and no fetor. The parts about the injury show no signs of unfavourable irritation. The patient rests very well; complains of pain and uneasiness about the pelvis and loins, but the fractures appear to give him little trouble.

May 25th. Pulse 100, temperature 99¾; a little discharge; serous and slightly bloody, without signs of decomposition.

May 26th. Pulse 90, temperature 99¾; discharge scanty and no fetor—serous.

May 27th. Pulse 84, temperature 99½; dressings not removed.

May 28th. Pulse 90, temperature 99¾; tongue furred; complains of pain in the pelvic regions on account of which the sleep has been disturbed. No pain at the seat of fracture, nor appearance of discharge having passed through gauze. Dressings not removed.

A tonic mixture of quinine and dilute muriatic acid given.

May 29th. Pulse 90, temperature 99¾.
" 30th. Pulse 96, temperature 99½.
" 31st. Pulse 86, temperature 99½.
June 1st. Pulse 90, temperature 99.

The dressings not removed from the leg since May 27th, as there was no pain or uneasiness, and the discharge had not passed through the gauze. Tongue clean, appetite improved, less pain about the pelvis, and sleeps better.

June 2nd. Pulse 84, temperature 98¾: injured parts present favourable appearance; slight discharge which has not passed through the gauze; the wounds seem superficial.

June 6th. Pulse 80, temperature 98½; no pain since last report; dressings removed with the usual antiseptic precautions and reapplied.

June 13th. Pulse 72, temperature normal; dressings removed; the parts appear favourable; no swelling, and but slight discharge, the wounds closing; lint, charged with boracic acid, applied.

June 20th. Patient allowed to leave his bed; wound over tibia closed; pasteboard splints were applied.

August 12th. The patient, since the first of July, has been going about with the assistance of crutches; the stiffness at ankle-joint is passing away; he is now able to support his weight partly on the injured limb; a small superficial ulcer remains below the malleolus, the healing of which has been delayed through moving about too much.

With reference to the fracture of the radius I need only remark that pine splints extending from the elbow to the base of the phalanges, well padded with cotton batting were applied, and excellent union resulted.

Professor E. Neubauer, the celebrated chemist, died Wiesbaden on June 2nd.

Translations.

The Treatment of Hœmoptysis in Tubercular Individuals.

When the hæmorrhage is moderate good effects are obtained by a method proposed by Dr. Ginbert (of Cannes) and tried with success by Professor Peter. It consists in the association of the sulphate of quinine with the ergot of rye; for example fifty centigrammes (7½ grains) of sulphate of quinine, and two grammes (30 grains) of ergot divided into ten packets to be taken by the patient in the course of the day.—*Bull. de Therap. Lyon Médical.*

Treatment of Vesical Atony by Ergotine Injections.—Langenbeck.

In three cases of vesical atony observed in old patients, Professor Langenbeck has obtained the best results from hypodemic injections of ergotine. Immediately after the injection the contractile power of the bladder was augmented and the patients micturated more abundantly. At the end of some days the bladder emptied itself almost entirely. In an old man, sixty-two years of age, who three or four times per day expelled about thirty grammes of urine when his bladder contained more than half a litre, the very same day on which a hypodermic of twelve centigrammes of Boujean's ergotine was employed, micturition was accomplished most satisfactorily. The prostate soon diminished in volume and after four injections the cure was was complete.—*L'Union Médicale.*

Blood Effusions into the Knee from Sprain.

We append the conclusion of a long article on this subject running through several numbers of *Le Progrès Médical* by Paul Seynod, Anatomical Assistant to the Faculty of Paris.

"1. Sprain of the knee may be complicated by an intra-articular effusion consisting of *pure blood.*

2. This intra-articular hæmorrhage is due either to communication of the spongy areolæ of the femur or tibia with the interior of the articular cavity, or to rupture of branches of the middle articular, and of the small vessels contained in the adipose ligament.

3. It is not correct to say, with Bonnet, that exaggeration of the motions of rotation of the knee always leaves the articulation intact, and necessarily produces fracture of both bones of the leg. Exaggeration of rotation, on the contrary, produces very characteristic lesions in the knee joint and plays an etiological part in the very great majority of sprains of this articulation.

4. The abundance of the effusion, the rapidity of its production and the often excessive slowness of its resorption are the principal clinical features of hæmarthrosis of the knee.

5. In the diagnosis of blood effusions into the knee, the considerations drawn from their abundance and the time of their appearance have a considerable value and are, so to speak, pathognomonic. A pasty, or a crepitant character of the fluctuation, and early periarticular ecchymoses are exceptional signs, and their absence should not in the least modify the diagnosis of hæmarthrosis in the presence of a very abundant and very rapid traumatic effusion. Methodical exploration of the joint, and the search for painful points and abnormal movements may, in certain cases furnish valuable information of the exact nature of articular lesions, but it should be known that very often the diagnosis of the sources of the hæmorrhage can be made only by exclusion and has no other basis than the data of experimentation.

6. In the majority of cases immediate puncture of the joint followed by immobilization and methodical compression of the limb, constitutes the surest and best treatment of blood effusions into the knee from sprain."

On the Physiological Effects of Salicylate of Soda upon the Circulation, and on its Mode of Action in Rheumatism.—(Societe de Biologie).

M. Oltramare, a pupil of Prof. Chauveau, has made a large number of experiments upon animals with the view of studying the physiological action of salicylate of soda. Introduced directly into the veins it constantly increases the pressure, the number of pulsations and the sys-

tolic force of the heart; the transient effect is due to a direct excitation of the heart and probably also of its motor centres. At the same time the quickness of the blood current, estimated by the hæmodromographe of Prof. Chauveau, gradually increases; this second effect, due to vascular dilatation is much more lasting. Under the influence of repeated injections, the excitability of the heart diminishes, then, when a toxic dose is reached, (which is about one gramme per kilogramme of the animal's weight for the dog, ass, and horse), irregularities of the pulse, intermittence, a sudden lowering of the pressure and lastly arrest of the heart, occur. It is by paralysis of this organ that the animal dies, and not by asphyxia as has been pretended. At the autopsy there is found intense congestion of the abdominal viscera agreeing with the vascular phenomena observed during life. If the bulb be divided a very pronounced anæmic condition succeeds to the hyperæmia; it seems evident therefore, to M. Oltramare, that the salicylate of soda acts upon the bulbar vaso motor centres. If now we establish a parallel between the anatomo-pathological processes of acute articular rheumatism, the physiological effects and the incontestable therapeutic properties of the salicylate of soda, M. Oltramare believes that we must admit this remedy acts by substituting for a localised hyperæmia a general capillary dilatation. In proportion as the rheumatic lesions are of a purely vascular character the salicylate will have a therapeutic action, but when trophic troubles supervene it will necessarily prove inefficacious. Thus is explained its insuccess in the subacute or chronic forms, an insuccess which in its turn seems to lend support to the theory."—*Le Progrès Médical.*

Fibrinous Synovitis and its Relation to White Swelling.

BY H. DURET, ANATOMICAL ASSISTANT TO THE FACULTY OF MEDICINE OF PARIS.

We append the conclusions of this work taken from *Le Progrès Médical.*

"1. There exists a fibrinous synovitis as there exists a fibrinous pleurisy.

2. This affection should be separated clinically from hydarthrosis, for this latter term should be exclusively restricted to purely serous effusions, similar to those of hydrothorax, hydropericardium, ascites, hydrocele, &c. A rational nomenclature demands this distinction.

3. This synovitis recognises probably as its principal cause the influence of cold, as does also fibrinous pleurisy.

4. It announces its presence by the existence of a phase *more or less acute* with elevation of the local temperature to a degree not met with in simple serous hydrarthrosis. The joint capsule is greatly distended and its walls are thickened by fibrinous infiltration. On palpitation a sensation of resilience, of elasticity, or of pseudo fluctuation is experienced, analogous to that produced by the presence of articular fungosities, and which is the result of interstitial fibrinous exudation, of effused fluid, and intraarticular fibrinous clots.

5. It sometimes ends in the production of false membranes, of fibrous bands, or by ankylosis. Sometimes there is a production of fleshy granulations, of fungosities beneath the fibrinous false membrane, and in the last place the process becomes similar to that which has been described as white swelling of the joints.

6. Fibrinous synovitis is in the majority of cases the point of departure of white swellings in the adult (35 to 45 years). In this case the general condition is not that of scrofula, but rather of rheumatism. The lesions remain for a long time superficial. If suppuration occur there is no caries, or other osseous lesion so pronounced as in scrofulous children. Perhaps, however, an analogous process may be discovered in the beginning of certain varieties of *tumor albus* in children. It is also probable that fungosities of the synovial sheaths, in adults, have likewise their point of departure in an inflammation with fibrinous exudation."

Hæmostasis in Amputation of the Thigh. —In a case at the Westminster Hospital, Mr. George Cowell recently amputated the thigh, using Davy's lever to control the iliac artery through the rectum. Under one ounce of blood was lost, Mr. Davy has records of seven cases treated by this method, in which the total amount of blood lost did not amount to 14 ounces.

Formularies.

Effervescing Draught.

Seventeen grs. of citric acid or half an ounce of fresh lemon juice will neutralize 25 grs. of pot. bicarb.; 20 of pot. carb., 20 of sodæ bicarb.; 35 of sodæ carb.; 15 of ammoniæ carb.; 13 of magnes. carb.

For Chronic Eczema.

Sulphate of iron one in ten of distilled water applied by means of wet compresses to chronic eczema is highly spoken of in the *Revista Medica de Chili* by Dr. Mariana, quoting from Prof. Percy.

Kumys.

Take five quarts of fresh cow's milk, half a pound of white sugar, and heat to 86° to 90°F, then add two drachms of compressed yeast and stir for a few minutes. Bottle in champagne bottles, but do not fill them to the cork. Shake a few times during the next three or four days.

Ice Cream and Beef Juice.—As an excellent dietary article, this is praised by Dr. J. J. Tucker in the Chicago *Journal*. His formula is—

R. Cream,	120	grams
Sugar,	30	"
Extract of vanilla,	8	"
Beef juice,	8	"

Any confectioner can make it, or it may readily be prepared at home, with a freezer. Its uses are obvious.

Salicylic Acid Mixture.

R. Acid salicylic	ʒi.
Spts. ætheris nit	ʒvi.
Soda bicarb. .....gr.	70.
Spts. lavandulæ co.....	ʒii.
Aquæ	ʒii.
Syrup aurant cort. ad.	ʒvi.

M.—Sig.

A teaspoonful every three or four hours. The acid and the spirits of ether should be mixed in a bottle, then add the soda, and afterward the water gradually till the effervescence ceases, and then the lavender and syrup.

Correspondence.

(To the Editor of the Canadian Journal of Medical Science.)

THE HAMILTON MEDICAL AND SURGICAL SOCIETY.

The regular meeting of the above society was held at the Royal Hotel on 2nd July. The Vice-President, Dr. Malloch, in the chair. There was a large attendance of the members. After the minutes were read, a resolution of condolence was passed, expressing regret at the death of Dr. J. B. Laing, an old member of the Society.

Dr. Mullin presented a patient who had fallen from a scaffold six weeks previously and sustained a compound fracture of the left tibia, opening into the ankle joint, also a Colles' fracture of the left forearm. The bones were found to be firmly united, and the wounds almost entirely healed, except to a small extent superficially. The fractures were treated antiseptically under a Lister's spray. The temperature never rose above 100° F.; the patient suffered neither pain nor swelling in the affected parts. The result was considered very satisfactory by all present.

Dr. Malloch presented a patient on whom he performed Symes' operation nine months previously. The patient had a very useful stump.

Dr. Ryall presented the subject of vomiting in pregnancy, and then at times more or less failure of controlling it by the usual remedies. The members present discussed the subject and their various modes of treatment.

Dr. Mills presented pathological specimens of fatty liver and kidney, and enlarged bronchial glands; a portion of nutmeg liver where the inter-cellular veins were very much enlarged; also a portion of an ovarian cyst. The meeting then adjourned.

A. Wolverton, Sec. H.M. & S.S.

Cinchona and its Alkaloids.—"Quinetum," "quinquinine," "cinchoquinine," "subsulphate of quinine," are equally good medicines. Quinine is costly; cinchoquinine is about half the price of quinine but double that of quinetum; quinquinine is about midway in price between quinetum and cinchoquinine.

THE CANADIAN

Journal of Medical Science,

A Monthly Journal of British and Foreign Medical Science, Criticism, and News.

TO CORRESPONDENTS.—*We shall be glad to receive from our friends everywhere, current medical news of general interest. Secretaries of County or Territorial medical associations will oblige by sending reports of the proceedings of their Associations to the corresponding editor.*

TORONTO, SEPTEMBER, 1879.

THE OLD ORGAN AND THE NEW.

The old organ of Trinity is sorely exercised by our strictures on the conduct of the Medical Council at its late meeting, but not more so than ourselves by the occurrence which called them forth. A due sense of our responsibility to the profession for the conduct of a body we did so much to create, compels us to use every effort to maintain the purity of the Council chamber, and whenever we find the rules of propriety outraged as on the occasion referred to, we shall not hesitate to hold the offenders up to the gaze of their constituents.

We wrote advisedly, after due deliberation, and with a full knowledge of all the facts, and now, only regret, that time has not developed one extenuating circumstance which would justify us in recalling a single word of what was then written. It is very amusing to see the old organ of the new school assume such an interest in its new protégé, but the duties of chaperon do not fit well, and the profession will rate at its true value its new found zeal. There are men living who know that the conductors of this journal spent their time and money freely to obtain for the profession even the present modicum of justice, while our cotem. was in swaddling clothes and its older colleagues were button-holeing M.P's in order to prevent the passage of the Medical Act which recognizes the right of the profession to manage its own affairs.

How the old organ doth spread its wings in defence of other peoples' progeny!!

It is really too bad for the old organ to poke fun at its new friends in their extremity in the way it does when it says "territorial members at their last meeting showed more than the usual amount of independence and refused to be led by the nose at the instance of a few manipulators." If Artemus Ward were alive he would have written "that is sarcasm," but the great showman's point is not required by any one who is conversant with their vacillation in regard to the curriculum and the annual examinations. There never was a body of men so much under the button-hole influence of at least one manipulator, and there is no man living who would be rash enough to guess what the curriculum might be next year if the present council should survive the impending election. The Council may have "ceased to be obsequious" but only to resign its freedom into the hands of an obsequious wirepuller, and that's all the difference. All the old organ's enthusiasm in behalf of territorial representation is but a shallow piece of by-play, to divert attention from the peccadilloes of its friends in the council and on the examining Board.

With reference to the treasurer, Dr. Aikens, we may safely leave that gentleman to take care of himself, for although *efforts were made* in an underhand way to asperse his character, yet his traducers had not the manliness to repeat them in open council, and although Dr. Berryman was put forward to entrap the Council into an implied censure, those who spoke, bore ample testimony to the faithfulness and impartiality with which he discharges the duties of his office and the resolution was voted down.

JOURNALISTIC.—*The American Journal of Electrology and Neurology*, edited by John Butler, M.D., 102 E. 22nd Street, New York. Published quarterly. Subscription, $2.00. Contains, No. 1 vol., good original matter and fair selections. It is well "got up" typographically, and we wish it success.

CANADIANS IN ENGLAND.—J. C. C. Cleaver, W. F. Cleaver, and W. H. Henderson, of Kingston, and T. D. Hockridge, J. B. Lawford, of McGill Medical College, have passed their primary examination at the Royal College of Surgeons, London, England.

MEDICINAL FLUID EXTRACTS.

We have, on various occasions, borne testimony to the elegant pharmaceutical preparations of the well known firm of John Wyeth & Bro., Philadelphia, and we now, with much pleasure, draw attention to these medicinal fluid extracts, which the firm are now introducing to the profession. The use of medicine in this concentrated form is, without doubt, a valuable mode of administration, and one which would be largely extended, were it not for the unreliable character of many of the so-called fluid extracts put upon the market (many of them no stronger than ordinary tinctures) and medical men have long felt the want of a line of genuine fluid extracts that they could confidently rely upon. We have, therefore, much pleasure in recommending to the profession the extracts manufactured by the above reliable firm, believing that they will fully meet the expectations of physicians. They are guaranteed to be of full and uniform standard and true to their representation, every extract representing absolutely the activity (grain for minum) of the drug. Physicians can therefore confidently rely upon getting the results anticipated from using these extracts, and we ask for them a full and thorough trial. Samples are being distributed largely among the profession, thus giving them an opportunity of testing the superiority claimed for them. They have in many cases been tested, and their superiority proved beyond question. These extracts can be had from all respectable chemists.

In noticing the above preparations we would take the opportunity of referring to the great success attending the introduction by Messrs. Wyeth & Bro., of their dialysed iron, the original and only preparation that has borne out all the claims made for it. If physicians have not in all cases obtained the results they anticipated, it has been more than likely due to the use of inferior preparations that have been substituted. In our own experience we have obtained the best results from the use of Wyeth's preparation; and as an article published in the *Boston Medical Record*, of April 3rd, by Dr. R. Amory, of Longwood, Mass., after showing the advantages obtained from the use of dialysed iron concludes by saying if physicians use weak and inferior preparations imposed upon them they cannot expect to obtain the results looked for.

Other preparations of this firm are worthy of notice. Their compressed powders are a real advance in pharmacy, they being so beautiful in form and free from all excipients (their greater solubility being thus ensured) are fast taking the lead in the minds of all lovers of pure drugs. Wyeth's elixirs also comprise a list of most valuable combinations, elegant in form and palatable to the taste, thus affording the physician the advantage of being able to administer nauseous drugs in an agreeable form, and with better results than can be obtained by the same medicines compounded by the druggist extemporaneously.

Wyeth's beef iron and wine, cod-liver oil and hypophosphites, chlorate potash tablets and peptonic pills, have all been submitted to the most severe tests.

Physicians having used some of these preparations and found them satisfactory, will find that all the preparations made by this firm are equally valuable, and that the success which has attended the introduction of their elixirs, compressed pills, dialysed iron, &c., will, in a greater measure, attend the introduction of their fluid extracts. We commend them with all confidence believing that they will, like Messrs. Wyeth's other preparations, prove all they profess.

ALEXIS ST. MARTIN.—From a recent letter to Dr. B. V. Hoagland, of West Union, Ohio, we learn that Alexis St. Martin, famous in physiological works for the experiments of Dr. Dr. Beaumont, is still alive, and at present a resident of St. Thomas, Joliette county, Province of Quebec, Canada, and is seventy-eight years old. The wound in his stomach has never closed, and at present the opening in his side is nearly an inch in diameter. His general health appears not to have been in any way affected by the curious wound in his side, but has always been excellent. For his age he is now quite strong and hearty. He has also been the father of twenty or more children, of whom four are now living. Has also been a hard worker, and never suffered from lack of digestion.

Book Notices.

Method for Performing Post-mortem Examinations. North Carolina Board of Health, Raleigh, N.C.

First Annual Announcement of the Homœopathic College of Physicians and Surgeons of Buffalo. Session 1879-80.

Transactions of the Medical Society of the State of Tennessee, at its 46th Annual Meeting, 1879, *Nashville, Tenn.* We intend to refer to these transactions in a future issue.

History of the Discovery of Anæsthesia, by J. Marion Sims, M.D., M.A., LL.D. From *Virginia Med. Monthly,* May, 1877; Richmond, 1877; New York, 1879.

The Treatment of Epithelioma of the Cervix Uteri. By J. Marion Sims, M.D., (reprint from *Am. Jour. of Obstet.*) July, 1879. New York: William Wood & Co.

A New Removable Paper Brace for the Treatment of Caries of the Spine, and of Lateral Curvature, by the Insertion of a Rubber Band to Exert Continuous Pressure over the Deformity, by Ap. Morgan Vance, M.D., Junior Assistant, Hospital for Ruptured and Crippled, New York.

Pocket Therapeutics and Dose Book. By Morse Stewart, jun., B.A., M.D. Second edition; revised and enlarged. Detroit: George D. Stewart 1878. Cloth, $1; morocco, $1 30.

Contains doses, tables of weights and measures, metric weights and doses. Abbreviation, classification and action of medicines. Formulæ for spray vapor, and hypodermic medication. Tables of solubilties, incompatibles. Index of diseases and remedies; signs of pregnancy; poisons and antidotes, symptomatology, &c., &c. This is a *multum in parvo* of a kind that we do not think much of. Most of the contents should be carried in the head of the physician and not in his pocket. Such ready remembrancers, are apt to engender habits of laziness. The book is good of its kind.

Man's Moral Nature—An Essay. By Dr. R. M. Bucke, Medical Superintendent of the Asylum for the Insane, London, Ont.

It is often necessary at the outset in the review of new books on scientific subjects, to ascertain the exact meaning authors attach to their phrases and words. This often saves a good deal of controversy. This is the more necessary in a book, said by the author, in the announcement, to "deal with the deepest problems of man's life," "to contain by impli cation a philosophy of art, and a philosophy of religion, and supplies a new key to universal history." It is said to be for the "use and interest of all men who are desirous of some explanation of the meaning of themselves and of the universe in which they live." It is quite evident that a book which can do this in even a faint degree is no ordinary production. Some writers are fond of adopting a nomenclature of their own, and of coining words to suit their ideas of correct meaning. Others use phrases well understood, and in common use, but wrest them from the accepted standard of interpretation, and others often do injustice to themselves by leading the reader to suppose that they are either wilful in oddity, or ignorant of the exact definitions unanimously agreed upon by the literary world. We feel impelled to make these remarks, after reading this book of Dr. Bucke, upon "Man's Moral Nature." There are a number of novel ideas put forth in this excellently got-up book, and couched in such unusual language, that, in justice to the author it is necessary to know what is meant by many of the expressions used. The title of the book is an evidence of this. The author says: (page 13,) "that moral nature is a bundle of faculties, and that the most of these faculties are called passions and emotions, —and that love, faith, hate, fear, are the most prominent functions of the moral nature, if they are not indeed the whole of it." If there be any meaning in words, it is hard to see how any of these passions and emotions can be the sum total of our moral nature, or even any part of it. Our moral nature refers solely to *moral judgments.* It is our sense of right and wrong,—simply this and nothing more. We can love, have faith, hate and fear, yet not ex-

ereise a moral judgment in any accepted sence. The brute creation do this down to a very low scale of being, without having a moral nature properly so-called. Unless there is a violent wrenching of the term from its universal interpretation, this term must mean the capacity we have to exercise intellectual judgments on ethical subjects. There can be no moral nature without intellect in a normal condition. Society does not hold the idiot, the lunatic, or the brute capable of exercising moral judgments, and hence responsible, just because of the dethronement of the intellect, or because of its existence on a low scale. Passion, desire and emotion necessarily need no such judgments to allow their exercise, but without intellect there can be no moral nature. It is well, however, to keep in mind what the author means when he uses this term, and only hold him to his own definition, even when he uses it in this unusual way.

The same might be said of the expression, "Lines of Cleavage," when applied to the relationship of man to his surroundings. This term is scarcely applicable because of the necessary intimacy and interdependence of a living being including its immediate apposition to the nearest existences. There is no analogy between that and the cleavage of crystalization, or of the fibres of muscles.

So also on page 6, we are told that memory is a registering function of the intellect, (so says Maudsley.) Now, there is no proof that memory is a function in any sense, and if it were, it cannot register for the simple reason that registration must have taken place before a remembrance can have an existence. If there is nothing received, there can be nothing to remember. So the reception (or registration) of mental or physical impressions must, necessarily, antedate memory.

On page 7 it is said, "we know, and can know, nothing about force, and nothing about qualities." We presume it is meant that we do not know them absolutely as distinct and separate entities, because it is equally true that in this sense we know of nothing in the universe. All that we are immediately cognizant of in the wide world is *consciousness*. Relatively the statement is not physiologically correct, as doubtless the author will know the first time a lunatic knocks him down. Force will then become an experience of consciousness, and it will also be a *striking* illustration of the chronological order in which the registration of an event, and the memory of it stand to one another.

On page 4 it is written that "certain forces, such as motion, heat and light, are correlative with man's receptive faculties." If this sentence means anything it must be that these faculties can conversely be changed into motion, heat and light. It is difficult to see how a faculty, function or act of anything can be changed in the way indicated. There is no proof given of this unknown conversion of a faculty.

The author also has the gravest doubts as to the existence of the *statical* or material part of man, at least he says we have no knowledge of its existence. This is a deplorable condition for humanity to be in, and it is a matter for regret that we are not informed whether our ignorance of it is absolute, and thus beyond inferential hypothesis of its existence or not.

On page 3 we are told that "man reacts upon and towards the external universe in three ways: namely, by his active nature, by his intellectual nature, and by his moral nature. It is natural to ask how it happens that we know of the external universe (meaning the whole system of created things) and its relations, seeing there are "the gravest doubts" as to its existence? A *nothing* can have no relations. Take this for granted, however, these divisions are scarcely apprehended because the first includes the other two. No one will deny that volition is active, and our moral judgments are no less so. We would have no evidence of their existence were it otherwise. We do not speak of right and wrong, and moral judgments in a theological sense, but we define them in the sense which Herbert Spencer has recently done in his "Data of Ethics" as the greater or less efficiency of the adjustment of acts to ends; in other words, it means the whole of human conduct in relation to itself and its surroundings. It is possible that either our stupidity or mental incapacity may have a good deal to do with

our obtuseness in not catching the meanings of these definitions.

The second part discusses metaphysical distinctions, and it must be confessed that some of them are novel. The whole enigma of human experience and knowledge through the agency of the moral nature is said to be simplified by reducing this nature to functions, and calling these ultimate elements, faith, love, fear and hate. Add to this quartette intellectual concepts and we have the complete psychical man. It is said this emotional state may exist in a simple form without being associated with any idea. That must mean that we may possess faith, love, fear, hate, without knowing it; but can there be knowledge without ideality? In other words, if this were true, these mental radicals may exist, and may *not* at the same time, although we have no proof of their existence but by a conception of them. The theology of this section shows that all the creeds of Christendom need reconstructing, and the sooner the dogmatists go about it the better, if we are to know our true relation to all existences. Even the Bible does not give an entirely satisfactory definition of faith, (see page 24) and the accepted meaning of "belief" is at fault. Our old fashioned faith has been considerably shaken on reading the following on page 26: "The gods of the heathens are demons. The God of the better samples of Christians is a Being in whom goodness greatly preponderates over evil. The one believes as firmly in his God or gods as does the other, and one has as much and as little evidence upon which to base his belief as the other has." The proof of this statement is not forthcoming except by other opinions of the same nature, but refuge must be taken in what is said at the outset of the essay, and which ought to be an end of all controversy, viz.: "I do not propose to prove anything in this book; proof never convinces." We will let the mathematicians join issue on this dogma of proof, but we are curious to know what proportion of goodness and of evil is in the Christian's God, and what class of Christians state or imply that this God has any evil in His nature. If such be the case their idea of His perfection must come to an end. It is possible that this certificate of character is subjective, and not objective, and that this conception of evil is not in this Christian God, but in His followers and believers. Either dilemma is bad enough to startle us.

On page 38 we are told that the higher emotions, and of course the great sympathetic as their source, cause the "higher races" to face death much more readily than those not thus endowed. Does the history of our race say so? The wild untutored Macedonians thrashed the highly emotional Greeks. The savage and stoical Gauls conquered the well organized and cultivated Romans. The Mamelukes, whose moral nature was of a low type, swept over Spain like an incoming tide, notwithstanding the superior sympathetic system of the Spaniards. The painted Picts and Scots were more than a match in individual bravery for the Romans. No one will deny that the wild Indian and the naked Zulu are as brave as their white, emotional, moral natured, civilized Christian foes. The author's two models of the higher emotional, viz., the Jews and women show no paramount evidence of personal bravery over the Gentiles or the male sex. In fact the contrary is true.

The balance of the book contains the fulcrum idea of the whole. It endeavours to prove that the great sympathetic system is the seat of the moral nature, as already defined. It has been a mistake to locate it in the cerebrum, when a system in which is seen physical cause and psychical effect can be consistently explained on the assumption that this nervous system, whose chief seat is among the organs of the trunk, is the functional cause of the moral nature. This is an old doctrine revived. Among the ancients the signs of the Zodiac were associated with mental states in different parts of the body, especially with the lower parts. This was a crude idea of the same kind and can be seen to-day on the title page of quack almanacs. This supposition existed long before the Christian era among the Magi of the East. In fact the doctrine of localization of mind in the cerebrum is a comparatively modern idea. The notion of scattering all our mental states to every part of the body had been orthodox down to a recent period in

medical history. Within this century the celebrated Bichat contended that the passions were located in the organs of organic life. He adopted very much the same arguments which are found in this book, and had a considerable following among members of the medical profession. The language of every day life led to this nomenclature. The poor heart was the seat of all goodness and badness; we had bowels of compassion; we are not supposed to stomach disagreeable duties; the origin of the word melancholy means *black bile*; a passionate man is *choleric*—he is bilious; a hypochondriac has something the matter with the organs under his short ribs, so the word indicates; a splenetic man is supposed to have the system in bad order, and any one who possesses sufficient of the *suaviter in modo* to extract spleen from such afflicted, indicates a power of mental surgery of a high order. Numbers of such every-day phrases are used in common speech, but all know they were only employed in a symbolical way. To establish a physiological doctrine analogous to this it was necessary to show that the organs of the trunk were largely supplied with nerves from the great sympathetic ganglia, and that the existence, power, and intensity of the so-called moral nature, depended on this system for its existence. The moral nature may be called a secretion of this material organization.

So many great minds have been led away by this view that it is not to be wondered at their copyists are many. Of course if the great sympathetic is the origin of our moral nature it follows that its existence is a necessary condition of the production of the moral nature. Is it not a fact that several of the lower creation do not possess a sympathetic system at all and others in a very rudimentary state; yet, such do exhibit the greatest anger, the intensest fear, and even love and hate? If this system be the cause of emotions, affections and desires, how comes it no equation can be found between its quantity, tonicity, and the nature which is said to flow from its operations? The reason is not far to seek when it is seen that the nervous system is only a medium of psychical manifestations, and not their exciting cause. The cart is put before the horse. Carpenter, although one of his school of thinkers is forced to admit in his "Mental Physiology," when writing about the sympathetic in the lower animals. "An analogy has even been drawn between the chain of *prevertebral* ganglia of the sympathetic, and the ventral cord of articulated animals. But this analogy entirely fails when we look at the distribution of the two sets of nerves, and the functions to which they respectively minister. Since it is perfectly clear from such comparison, that it is the spinal cord of vertebrata which really represents the ventral cord of articulata, as a series of locomotive or pedal ganglia." (See page 126 Am. Ed., 1874.) What is true of this series of ganglia is also true of those which are in nervous relation to them, not only is this similarity based on their functions, but also on their physiological structure. Here are countless myriads of creatures with no sympathetic system similar to ours, but being possessed of the moral nature defined by the author. On the other hand the whole scope of physical research goes to show that the direct medium of all the mental phenomena called the unit-man, is the cerebro-spinal system. The sympathetic is a valuable adjunct in giving nerve stimulus to organic life, but it does not solely perform the acts of a moral nature.

No one will deny that the actions of the different organs affect our minds. Although this is the case it does not necessarily follow that these mental operations are functions thereof. As well might the converse be held true, that because the emotions, desires and affections, excite the different organs to activity therefore these organs depend on them for sustenance and growth. Any student of natural philosophy can have suggested to him in the operations of light, heat and magnetism, many bodies in which are inherent certain powers and phenomena without such being functions of these bodies. The fact is, the two classes are inter-dependent on one another, but no reliable evidence goes to show that they are necessarily co existent and causal of one another.

Space forbids us noticing other points in Dr. Bucke's book from which many must differ. The reader cannot, however, rise from reading

the book without being convinced that the author has honestly endeavoured to arrive at truth in his own way. He is not satisfied with the ways and means heretofore adopted to arrive at basal verities, and he has avoided the beaten road, taking to byways and lanes of thought not often trodden now-a-days, in the hopes that he may be able to reach into the unknowable beyond his fellow-searchers. Unfortunately this has not been done. Yet, the careful collation of isolated truths, and the earnestness seen throughout, commend it to the candid reader as a valuable contribution to Canadian medical literature. The book is worth reading, even should the peruser differ from the writer, and all must admire the ingenious way many facts are brought in to uphold this material theory of the origin of "man's moral nature." We have endeavoured to give the reader an idea of the scope of the work by criticizing some of the salient points, but nothing short of a perusal of it can do justice to the inventive hypothesis therein set forth in a forcible way. The building up of a higher nature, out of a lower, has not been proven, but the fault does not lie in the author, for nature denies the doctrine.

Chondrosis of the Auricle.—An interesting case in veterinary pathology, and which has an important bearing on human physiology, is recorded by Mr. Hugues in the *Journal de Médecine de Bruxelles*. The right auricle of a horse aged six years, was found to be completely cartilaginous, being composed of three pieces of cartilage closely united to one another by fibrinous ligaments. The largest had the curvature of the corresponding ventricle, the outer surface being convex and the inner concave; it measured 14 centimetres by 9; the second piece measured 7 centimetres by 4. In no part could any trace of muscular fibres be discovered. The horse died of acute pleurisy, myocarditis, and pericarditis, consequent on a long drive after a journey, and until the commencement of the illness, a few days before its death, it appeared to be in perfect health. Mr. Hugues points out very pertinently that the case strikingly illustrates the passive *rôle* of the auricles in the action of the heart.—*Lancet.*

Miscellaneous.

A weak tartaric acid lemonade taken after quinine, accelerates solution and absorption, and relieves gastric irritability.

In St. Louis, ice is supplied free by subscription to the poor. This will promote the health and comfort and help the Temperance cause.

Iodide of potassium in $\frac{1}{16}$ grain doses every hour and a half is recommended for obstinate vomiting.

Appointments.—Charles A. Jones, of the village of Mount Forest, Esq., M.D., to be an Associate Coroner, in and for the County of Wellington.

We regret to have to announce the death of another of London's celebrated surgeons, Mr. C. F. Maunder, who died rather suddenly last July, aged forty-seven.

Syphilides.—Dr. Remont cured twelve invetrate cases that had long resisted specific treatment, by chrysophanic acid. He rubs in energetically an ointment of the strength of one to two parts of the acid to ten of vaseline.

Oxalate of Cerium in Pertussis.—Oxalate of cerium acts with astonishing promptness, reducing the frequency of the attacks, lessens their intensity, and invariably shortens the second and most severe state of the disease. No claim is made as to its action in the first or third stage. It is given in one single dose each day before breakfast. The rule was observed to continue the remedy one week longer than there was any tendency to whoop. The dose given was from one to two grains.—*New York Medical Record.*

Arsenic in Uterine Hœmorrhage.—Dr. J. R. Humphrey in the *Virginia Medical Monthly* for May, directs the attention to the great benefit that follows the administration of arsenic in menorrhagia and metrorrhagia. After relieving the patient for the time by the use of hœmostatics, and, if necessary, the tampon he gives five to ten drops (not minims)

of Fowler's solution three times a day, beginning about ten days before the coming period in cases of memorrhagia. In metrorrhagia he gives it in the same doses during two weeks out of every three, for at least two months. He claims better results from arsenic than from any other remedy or combination of remedies.

In the Chicago *Medical Journal and Examiner*, Dr. Andrews gives the following operation as that of a chiropodist, named Willard :—He neither extracts the nail nor slices off the overlapping flesh, but cuts out a narrow ellipse of tissue near the nail and parallel to its border, claiming that the border itself, where it rests against the edge of the nail, has its special structure adapted to its location, and ought not to be sacrificed. The removal of the strip of flesh being accomplished, he brings the edges of the wound together with fine sutures, thus drawing the border away from the nail and effecting a cure.

Lactopeptine.—This is a preparation which is acquiring no little reputation in the profession. It is composed of pepsin, pancreatine, diastase or vegetable ptyalin, lactic and hydrochloric acids, and sugar of milk. It is said to digest three or four times more coagulated albumen than any preparation of pepsin in the market. It has been found to be an excellent remedy in gastritis, chronic dyspepsia, in the diarrhœa and dysentry of children, in the vomiting of pregnancy, etc. It has received much praise, indeed, in the wasting diseases of children, which are attended largely with improper digestion of food. We feel confident that our friends will be pleased by a fair trial of it, and we hope they will make such, and some of them furnish us with a report.—*Cincinnati Medical News*, February, 1878.

On Thrombosis.—In some lectures given at the Hôpital des Enfants-Malades, M. Bouchut (*Gaz. des Hôpitaux*, March 13, 20, April 3, 1879) dwells on the subject of thrombosis of veins in cachectic and chronic maladies; a subject which he first wrote on in 1844. Instances of this are very numerous; not only do they occur in the lower limbs, but in the iliac veins, the portal vein, the jugular, the pulmonary arteries, the sinuses of the dura mater, and in the right cavities of the heart. The symptoms of this thrombosis of course differ with its seat: thus, in the pelvis, it may cause swelling and pain in the lower limbs; in the vena cava, intestinal hemorrhage; in the brachio-cephalic and the jugular, hæmoptysis. So in the sinuses of the dura mater this cachectic thrombosis produces convulsions in the child and delirium in the adult. M. Bouchut gives a *résumé* of 68 cases in illustration of this last statement, in all of which *post-mortem* examinations were made. He admits with Laucereaux that there are thromboses of inflammatory origin, and those due to retarded circulation; but confines himself to those of the latter class, which he has had an opportunity of observing frequently and carefully in children. The affection begins at the end of acute diseases, and in the course of chronic ones, with sudden convulsions of short duration, or with delirium of a more or less marked kind, announcing the approach of death. Convulsions are seen in these cases up to the age of about 7 years; while delirium is met with only in older children and adults. In the 38 observations of final convulsions in children affected with different cachectic diseases, 35 had thrombosis of the sinuses, and three overfilling with blood and encephalitis. The cases occurred under the following heads. Final convulsions from thrombosis of sinuses, 35 cases; chronic enteritis, 5; measles (catarrhal pneumonia), 2; chronic pneumonia, 5; phthisis, 8; anasarca without albuminuria, 1; chronic albuminuria, 2; whooping-cough and pneumonia, 7; scrofulous cachexia and tubercle of the bones, the lungs, and intestine, 1; gangrene of the mouth, 1; diptheria, 2—35. Convulsions, with stases of blood in the sinuses without thrombosis; chronic pneumonia, 1; whooping-cough, 2—38.—*London Medical Record.*

Births, Marriages, and Deaths.

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At Toronto, on July 22nd, the wife of Dr. G. P. De Grassi, of a daughter.

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TORONTO, OCTOBER, 1879.

Selections: Medicine.

THE INFLUENCE OF CONSTIPATION IN DEVELOPING DISEASE IN THE RECTUM AND ANUS.

An Inquiry into the Structure and Office of the Large Intestine and its Terminal Orifice, and the manner in which they behave when diseased.

BY REUBEN A. VANCE, M.D., OF CINCINNATI, O.

THE subject I have chosen for my remarks this evening possesses so many points of interest that I am forced to abandon any endeavour to treat it exhaustively, and shall limit myself to but few of the nnmerous questions connected with it. Yet, in order to do justice to the subjects I design discussing it is necessary to premise a few words relative to the structure of the parts involved, and to glance at the physiology of defecation. The principles involved in the development of one of the diseases excited by the morbid processes attendant upon and succeeding constipation—for instance, ulceration of the rectum—are essentially the same in respect of the other affections due to that condition of the abdominal organs. Consequently, the conclusions reached in relation to the ætiology of ulceration will apply, in great measure, to the development of other disorders in that organ.

In treating of the physiology of the rectum it is not only necessary to inculcate true views; erroneous doctrines must be combatted. On the present occasion it must suffice to state the former for there is no time for the latter. Modern researches have substantiated, in great degree, the ideas promulgated many years since by O'Beirne, of Dublin. He drew attention to the similarity that exists between the œsophagus and the rectum—the commencement and termination of the alimentary canal; and declared that the resemblance was not limited to visual characters and anatomical appearance, but could be traced in the offices performed by the respective structures. For instance, when the canal of the œsophagus is not distended by a bolus of food, its walls are in apposition; notwithstanding the popular and professional preconception to the contrary, he declared that an identical state of facts existed in the rectum—that normally the walls of the rectum were in contact and its canal closed except during the few moments following a call to the water-closet and preceding the regular evacuation of the bowels; that coincident with the uneasy sensation that is recognised as a call to evacuate the bowels, the band of muscular fibres at the junction of rectum and sigmoid flexure relaxes, and with this relaxation, the upper opening into the rectum becomes patent, and the feces, heretofore contained in the sigmoid flexure, pass through this orifice and enter the canal of the rectum. As a general rule this opening of the passage-way between the colon and rectum occurs but once in the twenty-four hours: if the intimation then given is heeded, and the individual retires, the bowels are easily and naturally evacuated. If however, on the contrary, this call to the closet is resisted, the uneasy sensation, after persisting for a variable period of time, subsides, an anti-peristaltic contraction is excited in the walls of the rectum and the feces which have passed from the colon into the rectum, are returned to the cavity of the sigmoid flexure, and the walls of the rectum again fall

together. When the call to retire is responded to, and the fecal matter passed from the sigmoid flexure into the rectum has been voided, the remaining contents of the large intestine are slowly urged forward from the cæcum through the colon to the sigmoid flexure to be extruded in their turn. Consequently when the call to defecate is properly responded to, and that physiological act thoroughly accomplished, the excrementitious matter in the sigmoid flexure and cæcum is voided; that part contained in the former cavity being the first to pass away, and that lodged in the latter slowly traversing the ascending, transverse and descending colon and making its exit through the rectum without stopping for any length of time at any point between the cæcum and the anus. The fecal matter lodged in the large intestine prior to the call for defecation seems to be divided into two masses, and to rest in two distinct cavities—one portion being lodged in the cæcum and the other in the sigmoid flexure—and while it is certain that normally none of the feces distend the canal of the rectum except at the time, and under the circumstances noted, it is also quite probable that the ascending transverse and descending colon are equally free from its presence.

It would not be uninteresting to review the minute anatomy of the parts about the junction of the rectum and sigmoid flexure, and to trace the course of the vessels, both arterial and venous, in their course along the walls of the rectum and at the anal aperture. The distribution of a few of the external longitudinal fibres which enter into the structure of the muscular walls of the rectum must not be passed over, for they are active in the production of certain movements of the parts not less important in their pathological than their physiological relations. This muscular coat is composed of circular and longitudinal fibres; the former internal, the latter external. Aggregations of these circular fibres constitute the sphincter which guards the passage-way between the sigmoid flexure and the rectum; an accumulation of similar fibres at the anal outlet forms the internal sphincter, This internal sphincter is merely the thickened lower border of the inner layer of the muscular wall of the rectum—externally, it is in apposition with the layer of longitudinal muscular fibres; internally, it is separated from the mucous lining of the intestine by a quantity of loose areolar tissue. This loose areolar tissue separates the mucous membrane of the rectum from the internal layer of circular fibres over the lower fourth of that organ, and permits the passage of a few of the external longitudinal fibres of the muscular wall of the rectum to which allusion has already been made. These longitudinal fibres pass down the external aspect of the rectum to the lower border of that organ, where they curve under the thickened ring of circular fibres constituting the internal sphincter and ascend on its inner surface to be attached to the fibrous substratum of the sub-mucous areolar tissue. A moment's reflection will render apparent the office performed by these fibres. In a word, these structures explain the phenomena of eversion of the mucous membrane of the anus which occurs during defecation. The first effect of contraction on the part of the longitudinal fibres which curve under the sphincter is to draw down, and then evert and protrude, the mucous lining of the lower end of the alimentary canal. When the fecal matter is discharged the protruded parts are promptly retracted by the natural contractility of adjacent structures, especially the levator muscles. Consequently, the mucous membrane of the lower part of the rectum during defecation moves freely over subjacent tissues; the part investing the internal and external sphincters is especially prone to change position during the functional activity of the organ; and ocular inspection demonstrates the fact that these movements may be from side to side during dilatation of the sphincter as well as in the line of the long axis of the intestine when the mucous membrane is first everted and then retracted with the commencement and conclusion of the physiological process of defecation.

These few facts premised, let us revert to the consequences of habitual neglect to empty the rectum at the proper time daily. One of the first results is that the rectum does not empty itself as completely as at first, and the lower part of its canal becomes a reservoir for fecal accumulations. In such cases, instead of

the organ remaining collapsed and empty, like the œsophagus, its canal furnishes lodgment to masses of excrementitious matter which should be evacuated. The evils induced are not confined to the organ at fault; the whole pelvic circulation may be deranged: external hæmorrhoids are developed, and internal growths made to bleed; while secondary derangements may be excited in neighbouring organs which remain long after the removal of the local accumulation. One common result, especially in cases where generally the patient has been of a regular habit of body prior to the development of the present attack of constipation, is for the unusual distention of the muscular walls to result in atony to such a degree that the whole coating of the intestine in the affected part hangs loose and flaccid. In these cases the rectum is rarely completely emptied; as a rule, sufficient material remains to distend the loose bag-like structures above the sphincters. Furthermore, the mucous membrane, and probably all the sub-mucous structures are deeply congested, and after an attack of constipation, quite a length of time must elapse before these tissues return to a perfectly natural state. One can readily comprehend the effect of a drastic cathartic in cases of this nature, and the only wonder is that more damage is not done than is ever heard of. The explanation of this exemption from almost inevitable evil seems to be due to the fact that a patient in whom the rectal walls have been distended and congested by constipation, suffers so much from the action of a cathartic, that the recumbent posture has to be assumed—a position favourable for the relief of the structures endangered. Otherwise, the lax loose structures of the rectal walls, when relieved from distension, fall within the grasp of the anal sphincters, where they are violently compressed, and it may be, strangulated. These tissues are already infiltrated from prolonged venous congestion, and their condition is such that even a mild degree of mechanical irritation is prone to excite violent reaction. The fact so generally noticed in cases of rectal ulceration in which the patient has remembered the symptomatic phenomena, and can recall them in the order developed—that is, that more or less hæmorrhage, together with deep-seated pain in the rectum were the result of the violent catharsis which followed the exhibition of remedies to relieve constipation, can be explained by supposing that the sphincters have inflicted more or less damage upon the relaxed, infiltrated and congested coating of the terminal portion of the large intestine.

Again, there is a peculiarity of structure which it is important should be borne in mind in connection with congestion of the rectum—this is, the fact that the veins of that organ are unprovided with valves. This peculiarity of conformation renders the walls of the rectum especially liable to congestion at all times; particularly so in cases where there is a lesion located in one part of their course. When great care is taken to preserve the healthy normal activity of the parts, the rectum is free from congestion; its walls, below the junction of its upper part with the sigmoid flexure are contracted, empty and in close apposition. It is only when constipation, long neglected, permits the rectum to become a reservoir for fecal accumulation, thus distending its coats, atonizing its muscular tissues and rendering its walls congested and its veins varicose, that the lower part of the intestinal canal fails properly to perform its functions, and becomes so favourite a site for disease. In cases of this kind a brisk cathartic may empty the large intestine and induce disease of the lining membrane by permitting the relaxed and congested tissues to fall within the grasp of the sphincters, where they are so violently compressed as to destroy their structural integrity. It is in this manner, as has already been stated, that ulceration of the rectum is most frequently excited. When once an ulcer has been developed, it of itself tends to derange the local circulation, and by the demands made upon neighbouring blood-vessels, to keep up more or less congestion. Healthy repair is prevented in the varicose tissues within the rectum by many of the circumstances which render ulcers of the leg, in individuals suffering from varicose veins of the lower extremities, so tedious and persistent. It may seem like a misuse of terms to apply the designation "varicose" to the veins which return to the portal circulation, yet, as a matter

of fact, the tissues from which these vessels convey the circulating fluid are placed in even worse circumstances than are those structures of the leg, the venous emunctories of which have become tortuous and dilated. The "varicose ulcer" of the leg derives its individuality from disturbed nutrition in the part in which it is situated: in like manner nutritive derangements in the walls of the rectum induce the peculiar form of ulceration we are now referring to. The distance from the heart at which the varicose ulcer of the extremity is located, and the disturbance in the return of blood from structural changes in the veins, are the main agents in developing the peculiar characteristics of that lesion. Again, in the rectum the blood arises from a capillary network at one end, and terminates in a capillary network at the other. In the leg the local congestion is favoured by the distance from the heart at which the lesion is located, and by the defective character of the channels through which the blood must return; in the rectum, hyperæmia is favoured by the relaxed state of surrounding parts, by the demand for blood made by the ulcerated surface, and by the fact that the power of the heart is reduced to a minimum by the capillary network which exists at the peripheral and central ends of the hæmorrhoidal circulation. The surface of the ulcer is constantly irritated by acrid rectal secretions; the tissue changes induced are of an unhealthy character, and readily explain the sloughy appearance generally presented by such lesions.

Neglect to evacuate the bowels at the proper time, initiating the chain of evils to which reference has been made, may result in numerous other affections than the one alluded to. The connection between constipation on the one hand, and fissure of the anus, abscess of the rectum, fistula in ano, internal and external hæmorrhoids, prolapsus ani and recti, stricture of the rectum, polypus of that organ, etc., etc., on the other hand, may not always be so surely traced, as between constipation and ulceration of the rectum, yet the relation of cause and effect exists between them, and frequently is susceptible of demonstration. The anatomy and physiology of the rectum and anus are the keys unlocking the pathology of these various affections; in like manner an acquaintance with the structure and function of those parts will prove invaluable in solving the question as to the proper treatment of the condition on which they depend.

A statement of the causes of constipation would be an enumeration of the various conditions which induce diseases of the cerebro-spinal axis and the abdominal organs. For our present purpose it will suffice to allude to those cases of constipation due to neglect of the bowels and inattention to the calls of nature—a very numerous and important class of cases. In this class are included cases of all degrees of severity: some, in whom the trouble is of recent growth, and readily relieved; others, of longer standing and greater severity; while the majority will comprise individuals in whom the habits of years are at fault, and in many of whom the evil due to their carelessness has been completely over-shadowed by the greater evil due to their imprudence. For in many, we find that the desire to regulate their bowels has engendered a disposition to meddle with drugs; between carelessness on the one hand, and drugging on the other, there are very many individuals who never empty their bowels without the aid of some form of cathartic medicine. Dismissing these lamentable facts from our minds permit me to ask your attention to a method of treatment which is efficient and free from danger.

This plan is very simple, and in part, is based on the principle that inasmuch as the evil we are endeavouring to combat owes its existence to a neglect to respond to the calls of nature, at the regular hour the system had habituated itself to having the bowels opened, we should first of all make an effort to solicit nature to re-establish that function by a voluntary attempt to void the feces when the proper time recurs daily. It is a fact of observation not sufficiently dwelt upon in this connection that it requires but a short sojourn in the rectum to cause absorption of the fluids in the feces, and to render the remaining matters hard and dry. Consequently, when the office of the large intestine has become deranged, and the natural disposition of the feces interrupted, the rectum may contain dry fecal matter during the greater

part of the time, notwithstanding that there seems to be a sufficient motion daily. In such cases, the addition of water to the contents of the large intestine is imperatively indicated. The bowels can be solicited to re-establish the suspended function, and the dry, hard fecal matter can be softened by the daily use of an enema: in this way both indications can be met, and in the vast majority of cases, a cure can be effected. Yet care must be taken in carrying out this plan of treatment, or the enemata may do harm instead of good—the conformation of the parts must be borne in mind, and when the enema is administered, it must be slowly injected through a tube which passes three or four inches up the rectum; it is preferable that the patient assume the recumbent posture, and throw in the fluid no faster than the rectum is able to receive and carry it up into the colon—by carefully attending to this point, from a pint to a quart of fluid can be administered advantageously, and if the recumbent posture is retained for a time, for from a quarter to half an hour may elapse before the bowels act. By pursuing this plan, the large intestine may be thoroughly emptied by the first injection; a repetition of the enema the following day at the same hour will secure another satisfactory evacuation. The result obtained will vary with the manner in which this measure is employed, but in many cases, the normal activity of the bowels can be restored. In other cases, even if a cure is not effected, the patient will secure a certain and painless method of emptying his bowels. It is to be regretted that the enema pipes generally sold are not supplied with a small bulbous-pointed flexible pipe ten or twelve inches in length; with such an instrument an enema could be thrown directly into the sigmoid flexure, and all danger of over-distension of the rectum would be avoided.—*Cinn. Lancet and Clinic.*

Physiological Albuminuria. — Professor Leube (Virchow's Archiv. Band LXXII., Heft 2) found that out of 119 healthy soldiers, 5 or 42 per cent. had albumen in the morning urine; while 19 out of 119, 16 per cent. had albumen in their midday urine, after marching on parade. There were no casts or blood corpuscles; the chief deposit was urates. The specific gravity showed no constant results. Those soldiers in whom albuminuria was found, were carefully examined, and were found to be quite free from pathological changes. The albuminous substance was discovered in the ordinary way, by boiling and acetic acid, but gave the reactions of serum albumen when separated and subjected to the tests.—*London Medical Record.*

NERVOUS DYSPEPSIA.

W. O. Leube states that many healthy persons experience peculiar nervous symptoms, as cerebral congestion, disinclination to work, weariness, fulness in the epigastrium, etc., immediately after eating.

These symptoms appear too soon after mealtime to attribute them to the absorption of certain products of digestion (*e.g.*, lactic acid), causing a self-poisoning of the nervous system. It is more likely that they depend upon direct irritation of the nerves of the stomach by mechanical irritation from the ingesta; it is known that in physiological experiments the general nervous system is sometimes affected by direct irritation of the gastric nerves. The symptoms above mentioned become pathological when they reach a certain point, which they usually do as a result of perceptible gastric troubles, as catarrh, ulcer, cancer, etc., but occasionally without any perceptible cause, in which case Leube calls the affection nervous dyspepsia. The condition is usually found in persons whose nervous system is easily excitable, in the upper classes, during the earlier years of puberty, and frequently accompanying other nervous troubles.

This affection is distinguished from catarrh in that the appetite and digestion are undisturbed; from cancer of the stomach by the age, and the absence of cachexia or tumour; from ulcer by the absence of pain and by the happy effect of electricity; finally, it is distinguished from enlargement of the stomach by physical examination (Leube's examination with the sound). The prognosis of nervous dyspepsia is not very favourable, and we must often be satisfied with relieving the condition without being able to cure it.

The treatment consists in an easily digestible diet, ice, quinine, electricity, hydropathy. In one case, ergotine acted favourably. As a subsequent regimen, sea-bathing or mountain air may be recommended.—*Cbl. für die Med. Wissen*, 1879. No. 23; from *Deutches Archiv f. Klin. Med.*

LIPŒMIA AND FAT EMBOLISM IN THE FATAL DYSPNŒA AND COMA OF DIABETES.

BY PROF. SANDERS AND D. J. HAMILTON, M.B.

In 1874 Prof. Kussmaul first drew attention to the occasional occurrence of dyspnœa in diabetes, often of terrible intensity, which, after a time, ended in coma and death. Previously the profession had learned to recognize death with thoracic symptoms as among the dangers which beset the unfortunate diabetic ; and these symptoms and this mode of death, when not clearly due to cerebral hæmorrhage had been ascribed to uræmia and rapidly occurring pneumonia—"pneumonie foudroyante." Careful analysis of the symptoms noted during life, and the evidence of autopsies, led Kussmaul to the conclusion that the coma was not accounted for by uræmia, and the dyspnœa was not pneumonic, and reasoning on these facts led to the conviction that they were due to some profound alteration of the blood.

The peculiar chloroform smell of the urine and excreta were attributed by Petters (1857) to acetone in the blood, and the coma and death were referred by him to acetone poisoning. Kaulich (1860) found this substance in various diseases, and beside being present in the urine, expired air, &c., &c., found it in the stomach—the result he thought of the fermentation of grape sugar. But it was noticed that the symptoms of acetone poisoning, apathy, somnolence, and especially *weakness* and *slowness of the respiration*, were dissimilar to the phenomena of diabetic dyspnœa described by Kussmaul. To determine this matter Kussmaul subjected animals to a series of observations, and he found that when it was inhaled or subcutaneously injected that it produced intoxication and stupor—not anæsthesia. Its effects were those of alcohol rather than chloroform ;—that it was more potent and more volatile than the former, and that owing to its extreme volatility it was rapidly carried off by pulmonary exhalation. In moderate quantities it caused intoxica tion with slow respiration. In profound acetone poisoning there was stupor, but the respiration was slow, and slightly stertorous—the respiratory movements were unusually deep, and subsequently irregular. Kussmaul thought the coma, in these observations, reseinbled that of diabetes. It struck him, however, that the symptomatology of acetone had not been worked out in man—that its action was transient, and to produce the physiological and toxic effects noticed the quantity required would be as large as that of alcohol. He doubted if so volatile a matter could be shown to accumulate sufficiently in the blood to act the part of a poison, and apparently anxious or willing to accept the acetone theory, he suggested that its long continued introduction into the blood might produce chronic poisoning, which might have acute outbursts as in cases of chronic alcoholism and delirium tremens.

The phenomena of an exceedingly well marked case of thoracic dyspnœa are detailed, and are here given as they are calculated to be of general interest. A farmer, aged 24, had been diabetic for four years. Under treatment, the diabetic symptoms underwent amelioration, the sp. gr. of his urine falling from 1.040 to 1.025, still there was gradual failure of muscular power, not accounted for by the quantity of urine or per centage of sugar. He had gastric attacks with spasmodic pains in stomach and bowels, acidity, occasional vomiting. An attack of alarming dyspnœa occurred about 1.30 p.m., and Prof. Sanders saw him at midnight. Patient was sitting up in bed with intense dyspnœa. Both respiratory acts were of extraordinary fulness and depth, exactly like those of a man who had won a mile race. The thoracic movements were free to excess. The air-hunger was so great that no violence of effort could satisfy it. The air entered the chest with perfect freedom, respiratory murmur everywhere, distinctly audible, no rales were present. The breathing was panting, as in a person out of breath from over exertion ; but there was no stertor or abnormal sound. Respirations 30, regular, pulse 100 ; temperature over 100, face flushed, lips livid. No clue for explanation was furnished by auscultating the heart. Stimulants antispasmodics failed to give relief—the and dyspnœa continued during the following day—there was a little delirium, but not marked,

the surface grew cold, his hands and lips blue, breathing continued rapid, growing more superficial, he became unconscious, and about 36 hours after the advent of the dyspnœa, died. During the attack he passed urine freely, and a peculiar vinegar-like smell was noticed in the room. No autopsy was made.

Prof. Sanders admitted into the Royal Infirmary a patient, æt. 20, with advanced diabetes, November, 1878, and carefully watched the progress of the case. Symptoms of dyspnœa came on and the patient died the next day. This was not so intense a case, so far as dyspnœa was concerned, as the preceding—the symptoms were, however, precisely similar in kind. As has been observed in innumerable cases of diabetes the blood in this presented the peculiar pink colour with separation of a milky or cream-like serum, and which have been especially noticed in so-called cases of acetonæmia. Arrangements had been made for determining the quantity of acetone in the blood. But the fatty condition of this fluid suggested the possibility of fat embolism, affording a more satisfactory explanation of the dyspnœa, than that furnished by the acetone theory, and the same idea had occurred independently to Mr. Hamilton. Externally, the only note-worthy appearance was the dry and apparently desquamating appearance of the cuticle about the shoulders. The right heart was distended with blood, which, with the exception of a few isolated and pale yellow coagula, was fluid. When removed from the heart it had a pinkish colour, and in appearance resembled prune juice and curdled milk. On standing for half an hour it separated into two about equal strata, the upper milk white, the lower deep pink in colour. Blood escaping on the table presented the same appearance, white on the surface, a stratum of deep pink beneath. After standing twenty four hours the upper stratum was of a light pinkish gray colour. At first the odor exhaled by the blood was variously compared to vinegar or sour beer—after about a quarter of an hour the odor was of decidedly ethereal nature, markedly like acetone. Microscopically, the upper milk like stratum, when first removed from the body was found to be composed of a fine chyle—like emulsion of oil globules suspended in a fluid, some large, others finally divided as in chyle. Ether by dissolving the oil, removed the milk white colour, leaving a hazy precipitate, which appeared to be of an albuminous nature. Examined after a day the oil globules were much larger, from several running together, and many were twice or three times the size of blood corpuscles, a finely granular precipitate, evidently of an albuminoid nature, held the oil globules loosely together. The oil globules became black on the addition of perosmic acid. The ethereal or acetone odor appeared stronger the next day, and continued for a week. The deeper stratum of blood showed oil globules and blood corpuscles mixed, the latter apparently unchanged. The lungs and all other viscera emitted the same acetone odor, the odor being, however, most marked from the lungs. The blood from the larger vessels in the congested lungs presented the appearances already mentioned. When examined in the fresh state, the greater number of capillaries on the alveolar walls were found filled with oil globules which had been turned black by the addition of perosmic acid. In many of the smallest branches of the pulmonary artery, oil globules of large size were also seen, filling the lumen of the vessel, and occluding it, as in a case of fat embolism from a fractured bone. In certain areas nearly every vessel appeared to be choked in this way.

The kidneys were large and flabby in consistance. The capsule stripped off easily, leaving a mottled surface with congested, stellate venous radicles. On section the cortex had a pinkish grey colour, while the medulla was somewhat congested. The examination of the liver, spleen, stomach and brain, presented nothing special.

Portions of the organs were placed in various hardening fluids, preparatory to microscopic examination. With a low power (50 diameters) nothing of note was seen in the general appearance of the pleura and lung tissue. The air vesicles were unaltered in shape and empty. The pulmonary arterioles, as well as most of the capillary vessels of the alveolar walls were filled with a material of a globular nature

which turned black with a solution of perosmic acid. This was the general appearance, but here and there in each microscopic section were areas in which nearly every capillary contained this black stained material. On examination with a high power (300 diameters) it was evident the globules were oil, and that the perosmic acid had stained them black. The oil globules varied in size, some being considerably less, others many times larger than the blood corpuscle. Several plexuses were filled with a continuous mass of oil, so that their ramifications on the alveolar wall looked as if injected with ink. The oil globules were generally separated from each other by a finely granular matter, this matter was evidently albuminoid, and was soluble in potash and acetic acid. There was a constant tendency in the larger globules to spread out and adhere to the walls of the capillaries, while the smaller remained free in the centre of the lumen. In the vessels occluded by the oil globules, blood corpuscles were rarely noticed. They did not seem to have undergone any alteration.

The kidneys on microscopic examination showed healthy renal structure. The only abnormality was in the contents of the blood vessels. A low power showed numerous oil globules in the vasa recta, while more highly magnified, the former were noticed lying in the vessels in the midst of a granular precipitate. The Malpighian bodies were usually free of oil—here and there, however, a loop of capillaries within a Malphigian tuft was plugged. The liver cells were not more fatty than usual; a little oil was noticed in the larger branches of the hepatic artery. Nothing noteworthy was found in the brain or medulla.

The most remarkable points brought out by the *post mortem* examination of this diabetic are,—First, the peculiar condition of the blood; and second, the "fat embola" in the vessels of the lungs and kidneys. The small vessels were not only plugged with the oily embola, but in the larger and middle-sized arteries, the oily globules spread themselves out on the wall of the vessel, and adhered to it. Such an obstruction must be a serious impediment to the flow of arterial blood, and when we examine the state of the capillaries and find how each vessel contains usually one or more oil globules, the conclusion is reasonable that we have here a most effectual embolic plugging of the pulmonary arterial system. The kidneys contained a few oil globules; but the lungs seemed to have arrested most of them probably on account of the great abundance of its capillary net work.

In a patient, aged 10 years, in the hospital for sick children, and who presented no alarming symptoms, dyspnœa coming on terminated fatally in coma in three days. The blood presented the same appearances as in the case above alluded to—the acetone or sour beer odor was noticed. When tested for acetone the reagents revealed its presence in only the merest traces. A microscopic examination was not made.

These *post mortems* appear to prove that the peculiar terminal dyspnœa and coma of diabetes are due to lipœmia and fat embolism, and not to acetonœmia. For these reasons,

1. The lipœmic state of the blood.

2. The anatomical evidence of fat embola, chiefly in the minute pulmonary vessels and capillaries, and to a less extent in the kidneys and other organs.

3. The entire similarity of the histological appearances in the lungs to those found in fatal fat embolism from fractured bones.

4. The similarity in the symptoms (dyspnœa and coma) in fat embolism from fracture and diabetes. It is admitted that more precise information is desirable—while it is claimed that the published descriptions of the phenomena, observed in the two conditions, are so nearly identical as to establish a strong argument in favour of similar pulmonary conditions.

5. The quantity of acetone found does not appear to be sufficient to account for the symptoms.

6. Acetone added to the blood does not produce either the naked eye or the microscopic appearance of lipœmia.

7. Acetone administered to rabbits produces the phenomena of alcoholic intoxication, the laboured breathing does not present the intensity of the severe diabetic dyspnœa.

8. In animals poisoned with acetone the blood does not present any appearance, naked eye or microscopic, like the peculiar blood of diabetes.—*Abstracted from Ed. Med. Journal.*

RETROGRESSIVE LYMPHADENOMATOUS GROWTHS.

At a recent meeting of the Pathological Society of London (*Med. Times and Gazette*, May 17, 1879) Dr. Coats, of Glasgow, exhibited for Dr. Gairdner, specimens of tumours taken from a man aged fifty-two, who had been under the care of Drs. Thomas and Norrie, of Dumfries. About twelve or fourteen months before his death, the patient began to observe tumours in his abdominal wall, the tumours appearing and disappearing at intervals, according to his own account. After six or seven months he was seen by Dr. Thomson, who then found a large tumour, four inches by three, in the abdominal wall, near the anterior-superior spine of the ilium, having the characters, when first seen, of a fatty growth; it was repeatedly examined at short intervals for a week or two, but after a few months had passed could not be seen at all when again looked for. Ten months after the first appearance of these swellings the patient's general health began to fail, and he suffered from sickness and vomiting. He was now seen by Dr. Gairdner, who found as many as thirty-four tumours over the body, most of them being situated subcutaneously, though some were deeper. The patient's sickness and vomiting continued, and death took place soon afterwards. Post-mortem there were found numerous tumours, not only in the subcutaneous tissues, but also in the connective tissue of the abdomen. In the fatty capsule of the right kidney there were several, quite distinct from both the kidney and from the supra-renal capsule. The left supra-renal body was apparently involved in a mass of similar tumours, many of which were breaking down like blood-clots. One large tumour almost occluded the calibre of the intestine, and there were several in the mesentery. He (Dr. Coats) had found the tumours composed of a course reticulum, in which there were many round lymphoid cells. The tendency seen in several of them to hemorrhage and breaking down might possibly explain the absorption and disappearance of those that had vanished during the life of the patient. The exhibitor requested that the specimens be referred to the Morbid Growths Committee.

Dr. Norman Moore asked whether any change had been observed during the life of the patient in the condition of the blood. In a recent case in St. Bartholomew's Hospital, where there had been many tumours in various parts of the body, among them a large one near the kidney, the white blood-corpuscles had been found markedly increased, though hardly to the degree characteristic of leukæmia. But in that case there had been no history of absorption of the tumours.

Dr. George Thin had seen a case at Vienna, in the *clinique* of Hebra, exactly similar to the one reported by Dr. Coats, only there was even a greater number of superficial tumours in the former than in the latter case. That one had been unique in Hebra's experience, and there was much discussion as to its real nature. Post-mortem, many growths had been found in the cellular tissue of the abdomen, as in Dr. Coats's case. Some of these had been sent to Ranvier of Paris for examination, and he had declared them to be lymphoid in character. He (Dr. Thin) did not see that such growths should necessarily be considered lymphoid, although they were found to contain lymphoid cells, for any inflammatory lesion under the skin would be attended with the exudation of white blood-corpuscles. Another case has just been reported by Dr. Duhring, of America, under the name of inflammatory neoplasm, which also seemed from the microscopic description to be of a similar nature.

Sir James Paget said the report of such a case was useful, and likely to help in the explanation of those rare instances in which tumours diagnosed to be cancerous had disappeared after a time. He suspected that there was a greater number of such cases on record than might be imagined, and the collection of them would be an interesting and important undertaking. Three cases of the disappearance of tumours in this way were known to himself. One was in the person of a young man, who had suffered for two or three years with what appeared to be ordinary lymphadenomatous growths, there being clusters of enlarged glands in the neck, axilla, and groins. The patient had also paraplegia—a symptom he had found in another case of lymphadenoma. Within a

week these tumours all suddenly disappeared, but the patient then began to suffer from dyspnœa, and soon afterwards died, no autopsy being allowed. Another case, mentioned in his lectures at the College of Surgeons, was regarded as one of multiple medullary cancer (what would now be called small-celled sarcoma), and the microscope corroborated this diagnosis. The growths occurred in the neck and axilla. There was also a very large mass over one deltoid, which suppurated and sloughed, during which process nearly all the other growths disappeared. The man recovered, and enjoyed good health for some months; but the growth afterwards recurred, and caused death. The third case was one which he had diagnosed as medullary cancer of an undescended testis. There was a tumour as large as two fists, and he had prescribed liquor potassæ and iodide of potassium, under which treatment the mass soon entirely disappeared. In eight or ten weeks, however, it recurred, but disappeared again under the same treatment. This also happened a third time; but, having recurred a fourth time, it was no longer amenable to treatment, and the patient died. The microscope confirmed his original diagnosis as to the nature of the growth.

Dr. Wilks also thought that such cases were not so very rare as was thought. There was at present in Guy's Hospital a girl who had had tumours of the arm, shoulder, and groin. All the tumours had disappeared except that of the arm. He had regarded them as of a lymphoid character. Many years ago he brought before the Society a young woman who presented at first a number of soft tumours over the body, which afterwards disappeared. These were regarded at the time as blood-cysts, but they may have been of the nature of these lymphoid growths.

Mr. Butlin recalled the case of a boy he had already brought before the Society, in which there had at first been tumours in the parotid region, and afterwards in the testes and abdomen. All the tumours were found to be lymphosarcomatous on microscopic examination. The left testicle had increased in size till death; while the other had diminished somewhat though not entirely. He had found the pelvic glands much more affected on the right side than on the left, and he had a notion that this difference was connected with the changes of the testes, those on the right side having probably become more involved as they relieved the testicle of that side of its morbid products, whereas on the left side the testicle had gone on unrelieved.

The President mentioned that, in the discussion on lymphadenoma, Sir W. Gull had stated very prominently that he had seen spontaneous disappearance of lymphoid tumours in this way.

Dr. Barlow mentioned the case of a boy in which lymphadenomatous tumours of the mediastinum, which had deflected the trachea from the middle line, rapidly disappeared at that site before death. He had seen another similar case attended with considerable pyrexia. In a third case, a patient of Dr. Stephen Mackenzie, the tumours had rapidly disappeared under arsenic.

Dr. Stephen Mackenzie corroborated the last statement. The patient, after taking fifteen drops of liquor arsenicalis daily for a week, began to improve, and after a fortnight the swellings diminished so rapidly that the patient declared most of the diminution had taken place in a single night. He believed the patient was now quite cured. Another case, presenting subcutaneous tumours believed to be of syphilitic origin, had been treated with iodide of potassium, and in three weeks the tumours had entirely vanished. Syphilitic growths were of course very similar histologically to these lymphadenomatous tumours, and when the former disappeared so quickly with iodide of potassium, he thought it need not be wondered at if the latter should also be found to disappear very rapidly.

Dr. Wilks wished to add his testimony to the great value of arsenic in these cases of lymphadenoma. All the cases he had seen improve had been treated with arsenic.

Dr. Coats, in reply, could not say whether the blood had been examined during the life of the patient. The object in view in bringing forward the case had been already in a great measure attained by the interesting discussion it had called forth.—*Abstract.*

PLEURITIC EPILEPSY AND HEMIPLEGIA.

In 1875, M. Raymond read before the Société des Hôpitaux two very interesting observations on the subject of patients who were suddenly seized with convulsions and hemiplegia, some time after having been operated upon for empyema, while injections were being made into the pleura. Several similar facts have since been observed which M. Aubain has, together with a case which had come under his own observation, worked up very successfully in his thesis (*Thése de Paris*, 1878, and *Journal de Mèdecine et de Chirurgie*, February, 1879). The *modus operandi* is as follows: A patient who has been suffering from purulent pleurisy, and on whom the operation for empyema has been performed, has his wound washed out every day with some disinfectant. He bears these injections without experiencing any inconvenience or pain for a month, six weeks, or more, when suddenly, without any premonitory warnings, the patient, who is sitting up in bed while the injection is being made as usual, falls backward in a state of imminent syncope. In a very short time convulsive spasms come on; they are almost always universal, but generally stronger on the side which corresponds to the empyema. The patient's teeth are set, the pupils which have at first been contracted are subsequently dilated. The tonic convulsions are followed by contractions; the breathing becomes stertorous, the patient foams at the mouth; urine and feces are passed involuntarily; he remains in a state of epileptic coma for half an hour or an hour, when he again recovers consciousness. Sometimes nothing more occurs, or another similar fit may supervene the same day, or two or three days later, without any injury to the patient. But in some very serious cases the patient does not recover consciousness; fit follows fit; the contractions persist; in a few opisthotonos has been observed, and the patient dies in ten or fifteen hours. This is termed pleuritic epilepsy. In some cases, however, another phenomenon has been observed in connection with those already mentioncd, viz., hemiplegia. It may affect only one of the lower or superior extremities, or the face, the paralyzed members always being on the side which corresponds to the empyema. Motility is seldom entirly abolished, so that the affection might perhaps rather be defined as a certain degree of paresis, without any distinct disturbances of the sensibility. It is transitory, and if the patient recovers from the attack it also disappears a few days later. Lastly, there is a third class, in which the hemiplegia comes on gradually without any preceding convulsions. The symptoms are the same as above, but the affections always disappear entirely after a certain time. That these accidents are very dangerous, is demonstrated by the fact that four out of the ten cases mentiontd by M. Aubain have terminated fatally. At the necropsy, no cerebral lesion which might account for the fatal issue could be discovered; the pathogenesis of the cases is also very obscure. It is very curious that these accidents should always happen when the patient is almost convalescent, and at the moment when the injection is being made. In order to avoid this complication great càre should be observed in making the injections into the pleura. Very small quantities of the liquid must be injected at a time, and not too much force used in the operation.—*London Med. Record, May* 15, 1879.

Chondrosis of the Auricle.—An interesting case in veterinary pathology, and which has an important bearing on human physiology, is recorded by Mr. Hugues in the *Journal de Médecine de Bruxelles*. The right auricle of a horse, aged six years, was found to be completely cartilaginous, being composed of three pieces of cartilage closely united to one another by fibrous ligaments. The largest had the curvature of the corresponding ventricle, the outer surface being convex and the inner concave; it measured 14 centimetres by 9; the second piece measured 7 centimetres by 4. In no part could any trace of muscular fibres be discovered. The horse died of acute pleurisy, myocarditis, and pericarditis, consequent on a long drive after a journey, and until the commencement of the illness, a few days before its death, it appeared to be in perfect health. Mr. Hugues points out very pertinently that the case strikingly illustrates the passive *rôle* of the auricles in the action of the heart.—*Lancet*, June 14, 1879.

ON THROMBOSIS.

In some lectures given at the Hôpital des Enfants-Maladies, M. Bouchut (*Gaz. des Hôpitaux*, March 13, 20, April 3, 1879) dwells on the subject of thrombosis of veins in cachectic and chronic maladies; a subject which he first wrote on in 1844. Instances of this are very numerous; not only do they occur in the lower limbs, but in the iliac veins, the portal vein, the jugular, the pulmonary arteries, the sinuses of the dura mater, and in the right cavities of the heart. The symptoms of this thrombosis of course differ with its seat: thus, in the pelvis, it may cause swelling and pain in the lower limbs; in the vena cava, intestinal hæmorrhage; in the brachio-cephalic and the jugular, hæmoptysis. So in the sinuses of the dura mater this cachectic thrombosis produces convulsions in the child and delirium in the adult. M. Bouchut gives a *résumé* of 68 cases in illustration of this last statement, in all of which *post-mortem* examinations were made. He admits with Lancereaux that there are thromboses of inflammatory origin, and those due to retarded circulation; but confines himself to those of the latter class, which he has had an opportunity of observing frequently and carefully in children. The affection begins at the end of acute diseases, and in the course of chronic ones, with sudden convulsions of short duration, or with delirium of a more or less marked kind, announcing the approach of death. Convulsions are seen in these cases up to the age of about seven years; while delirium is met with only in older children and adults. In the 38 observations of final convulsions in children affected with different cachectic diseases, 35 had thrombosis of the sinuses, and three overfilling with blood and encephalitis. The cases occurred under the following heads. Final convulsions from thrombosis of sinuses, 35 cases; chronic enteritis, 5; measles (catarrhal pneumonia), 2; chronic pneumonia, 5; phthisis, 8; anasarca without albuminuria, 1; chronic albuminuria, 2; whooping-cough and pneumonia, 7: scrofulus cachexia and tubercle of the bones, the lungs, and the intestine, 1; gangrene of the mouth, 1; diphtheria, 2—35. Convulsions, with stasis of blood in the sinuses without thrombosis: chronic pneumonia, 1; whooping-cough, 2—38.—*London Med. Record*, June 15, 1879.

PATHOLOGY OF ADDISON'S DISEASE.

In the *Archiv de Physiologie Normale et Pathologique*, 1878, Nos. 5 and 6, M. Jacquet arrives at the following conclusions: 1. In Addison's disease, the bronzed skin one finds only as a lesion of the sympathetic system, and pigmentation, without atrophy, of the nervous cells of the ganglia which are in the neighbourhood of the diseased suprarenal glands. 2. The degeneration of a part of the nervous fibres attaching the semilunar ganglia to the nervous centres ought to be regarded as secondary and consecutive to the process of sclerosis which accompanies the tuberculization of the capsules. 3. That lesion is insufficient to serve as the basis of a pathogenic theory of Addison's disease. 4. Hyperpigmentation of the nervous cells of the great sympathetic and of the cerebro-spinal system is a fact of the same order as the hyperpigmentation of the epidermic cells of the Malpighian plexus. 5. This hyperpigmentation renders probable the existence of an alteration of the blood by the substances which a suprarenal gland would, in the normal state, be employed in utilizing by transforming them. 6. The alteration of the blood by functional or organic insufficiency of the suprarenal glands is a pathological phenomenon analogous to that which exists in chronic uræmia. 7. Alongside of the melanodermia, by alteration of the suprarenal tissue, there seem to exist cases in which the melanodermia is due to the lesion of other blood-making organs. 8. Clinical researches in Addison's disease ought especially to be directed to the chemical analysis of the blood and the urine.—*London Med. Record*, April 15, 1879.

THE USE OF IRON IN CERTAIN STAGES OF CARDIAC DISEASE, AND THE ADVANTAGE OF COMBINING CHLORIDE OF AMMONIUM WITH IRON. —In a very interesting and instructive paper (*Practitioner*, August, 1879) Dr. T. Grainger Stewart, Prof. of Practice of Physic in the University of Edinburgh, draws attention to two points. First, that in certain cardiac cases, particularly those in which the aortic valves are diseased, a peculiar condition sometimes arises which demands for its treatment large doses of iron. Second, that in some cases, both belonging to the above group and of other kinds, the reception of iron by the system is greatly facilitated if chloride of ammonium be administered along with it.—*Abstract.*

Surgery.

MALIGNANCY IN TUMOURS.

BY P. W. VAN PEYMA, M.D.

* * * As to the character of cancer cells, I quote also from Green: "The cells are characterized by their large size, by the diversity of their forms, and by the magnitude and prominence of their nuclei and nucleoli. In size they vary from 1-600 to 1-1,500 of an inch in diameter, the majority being about five times as large as a red blood corpuscle. They are round, oval, fusiform, polygonal—exhibiting in short every diversity of outline. * * * The nuclei, which are large and prominent, are round or oval in shape, and contain one or more nucleoli. The nuclei are perhaps most frequently single; two, however, are frequently met with, and in the softer and more rapidly growing cancers, they may be much more numerous. The cells rapidly undergo retrogressive changes, hence they usually contain molecular fat. They are many times exceedingly destructible, so that sometimes more free nuclei than cells are visible. Cells precisely similar to these are met with in other morbid growths, and also in normal tissues. *There are thus no specific "cancer cells."* It is the general character of the cells, together with their mode of distribution in the meshes of a fibroid stroma, that determines the nature of a growth to which they belong. "The appearance presented by these cells grouped within the alveoli of the cancer sometimes closely simulates in the earlier stages of growth that of simple adenoma," only here the cells are less irregular and more like the normal. It will be noticed that the quotation denies explicitly the existence of a *cancer cell*, that is, a cell characteristic of this growth. On the contrary it is exactly this want of anything characteristic; the great variety of shape and size and condition, which is to any extent peculiar. Add to this the arrangement in alveoli, formed of connective or fibrous tissue, and we have all that is in any sense characteristic of cancer, from a histological standpoint. And even this is not as much so as could be wished. We have already noticed its resemblance to adenoma. Wagner says, "The alveolar structure of cancer was long regarded as especially characteristic. This, however, is not the case. Adenoma also, and many sarcomata and cystomata, show an alveolar structure. To draw conclusions from the alveolar texture of new formations, it is always necessary to consider the structure of the mother tissue." And, in summing up, he concludes as follows: "From these characters it follows that at the present time there are no strict histological peculiarities. At the present time the notion connected with the cancer is especially clinical, not anatomical."

In now closing our anatomical description of sarcoma and cancer with a short notice of the course and relation of the blood-vessels and lymphatics, we are led to remark a very interesting anatomical difference between the two growths; and one having an important bearing in pathology. In the sarcoma the vessels are not supported by a stroma, as is the case in cancer, but ramify among the cells of the growth, hence the facility with which these tumours become generally disseminated. On the other hand, according to Cornil and Ranvier, the lymphatics communicate directly with the alveoli of cancer. This explains the tendency of cancer to infect lymphatic glands.

We now come to the subject proper, viz: malignancy. Its definition has already been given—a tendency to spread rapidly and to recur after removal. The questions now are upon what does this depend, and why are certain growths more malignant than others. From what has preceded our answer may possibly have been anticipated—that it depends upon the transmission of certain elements, probably cellular, to different parts of the body. This is possible and actually occurs in three ways.

I. Locally by simple extension of the growth.

II. By means of the lymphatics.

III. By way of the blood-vessels.

"As a general rule, the more juice, or cells a growth contains, and the richer it is in blood-vessels and lymphatics, the more quickly will it infect the lymphatic glands and internal organs," and conversely. In addition to this another point must receive consideration, viz: the difference in the mode of growth of tumours. The proportion of central and peri

pheral growth is not the same in all tumours. Cancers and sarcomata are characterized by a predominantly peripheral growth. Other things being equal, a peripheral growing tumour is more malignant than one whose growth is central. The reason of this is obvious. A centrally growing tumour has its active proliferating cells surmounted by a zone, in many instances a capsule of inactive, if not dead material; while in the case of the peripheral growing tumour the active multiplying and infecting cells are at the peripheral in immediate contact with the surrounding tissues. The absorption of the elements of the primary growth has, according to Wagner, been demonstrated. He says: "For some cases it has been demonstrated with certainty that cancer masses as a whole, and cancer cells especially, which are free in the blood-vessels, having been transported thence and deposited in other parts, become the cause of cancerous formations." He gives similar testimony as to their entrance into the lymphatics. Their mode of action after reaching the part is, according to Green, "by virtue of an influence on the cells of the tissue where they lodge, which may be termed spermatic influence, and which is strictly comparable with that of the sperm cell in the ovum." That is, it excites the cells of the part to a peculiar activity and multiplication.

In conclusion, let me call attention to one of the practical points intimately connected with the subject:

If the views contained in this paper are correct, any expert to whom we may hereafter carry a specimen for examination, will not say "this growth is malignant, or this growth is benignant and harmless." He will rather express his opinion in relative terms, as, for example, "The specimen which I have examined is more or less abundant in cells; their character, as to shape, more or less adapts them for absorption; the arrangement of its blood-vessels and lymphatics is such that they will or will not greatly facilitate absorption and infection of neighbouring tissues; the extent of the degeneration and breaking down of cells, and the comparative number of multinucleated cells and the small round cells, to the exclusion of any decided tendency to elongate and develop, prove its more or less rapid growth and destructive power." The consequence will be that we shall watch all morbid growths with a view to their malignancy, being especially fearful of those possessing the above properties in a marked degree. The question will no longer be, is the growth malignant or benign; but to what degee is it malignant, that is, liable to recur, to spread and be destructive.

The main object of the paper has been, by means of an example, to call attention to the fact of transition as seen in pathology.

Many of the positions taken being contrary to the views held by the majority of medical practitioners, more particularly those who have not given the subject any special study, I have felt warranted in making numerous authoritative quotations.

In the opinion of the writer, more attention should be paid to general principles, both in disease and therapeutics. The result would be a diminishing amount of superstitious belief in specifics and a growing clearness of vision in matters medical.—*Buffalo Medical and Surgical Journal.*

Prurigo Formicans.—Dr. Hillairet, lecturing at the St. Louis Hospital (*Rév. Méd.* May 3) on a case of prurigo formicans, occurring in a youth of twenty who had been tormented with it since he was six years of age, observed that he could not agree with Professors Bazin and Hardy in believing that this invetrate form of prurigo is curable. In all the cases which he has met with that have commenced at an early period of life, every means that has been tried has failed in effecting a cure, although temporary alleviation may be obtained. The treatment which he has found most successful in attaining this latter object, although a painful and disagreeable one, succeeds in giving relief, which may last two or three months. It is that employed for the rapid treatment of itch. First, the whole of the body is thoroughly washed with "black soap," and immediately afterwards a prolonged bath is taken. On leaving the bath the patient is thoroughly rubbed with sulphur ointment. Next day the same treatment is repeated. It is then suspended for two days, when it is again put into force for the last time.—*Medical Times and Gaz.*

Midwifery.

A CASE OF OBSTINATE ULCERATION OF THE NECK OF THE UTERUS CURED BY GRAFTING.

The patient was a prostitute who had been previously treated for pelvic peritonitis. Examination with the speculum showed that the neck of the uterus was very much enlarged and hard, and around the os was a circular ulcer seven-eighths of an inch in diameter, and longer in the vertical direction; its surface was studded with bright red, healthy granulations. The ulceration was treated in a variety of ways for one and a half months without producing the slightest benefit. Grafting of the mucous membrane was then resorted to in the following manner: A small fold of mucous membrane was stripped off from the side of the vaginal wall, and was cut in two. The granulations on the ulcer having been scratched below and to the left of the os, the pieces were embedded in the granulations by means of an instrument used for tying deep sutures. Another piece of membrane was cut off and embedded in the granulations above the os. The speculum was left in position, and the patient kept on her back for an hour, at the end of which time a large tampon of cotton, moistened with pure glycerine, was placed against the ulcer, and the speculum was withdrawn. Strict quiet in bed was enjoined, and the tampon was removed the next morning. Five days afterward a pellicle of newly-formed mucous membrane was found to have formed from the three grafts. The remainder of the ulcer retained its red granular appearance. Three days later, the ulcer was all covered with new mucous membrane, except a narrow rim just above the external os. A fresh piece of vaginal mucous membrane was now placed in each external angle of the os and treated in the same manner as previously. When examined, a month later, the site of the ulcer was entirely covered by new mucous membrane.—*Archives of Medicine*, Dr. R. W. Amidon, April, 1879.

The London Lancet says: "It is *intolerable* that a qualification in England should not be a qualification in Canada.

Puerperal Thrombosis.—I will not intrude upon you other analogies. Many will present themselves to your minds. I will only hint at the close pathological relations between these cases of so-called phlegmasia dolens in childbed women and septicæmic puerperal fever, pelvic cellulitis, and pelvic peritonitis and inflammations of other serous membranes. Phlegmasia dolens may be taken as the type of what I long ago proposed to call the "autogenetic" puerperal fever, in contradistinction from those fevers which owe their origin to empoisonment from without, the "heterogenetic" fevers. But we must not forget that phlegmasia dolens may ensue upon the ingestion of foreign poisons. The great clinical lessons illustrated and enforced by the very imperfect remarks which I have been invited to submit to you are these:—1. The origin of phlegmasia dolens in lying-in women can mostly be accounted for by processes springing up in her own system. 2. The blood of the recently delivered woman is in a state highly prone to coagulate. 3. It will coagulate when it is invaded by effete materials or septic matter in undue proportion to the excretory power of the system. 4. Such undue proportion will accumulate when the free action of the great excretory organs, the breasts, lungs, liver, kidney, skin, and mucous membrane of the intestines is greatly impaired by chronic antecedent imperfection, or is suddenly checked under the influence of cold, emotion, or other form of shock. To anticipate these causes, to prepare and keep the glandular system in good working order, to prevent the accumulation of poisonous matter in the blood, is the obvious indication, one which we ought to be able in most instances to carry out. The theories or hypotheses of thrombosis arising under conditions other than puerperal must be in harmony with what is observed in puerperal thrombosis.—*Dr. Barnes, in Brit. Med. Journal.*

Composition of various Foods for Infants.—Dr. N. Gerber, of Thun, has published a table of the most usually employed foods for children sold in Switzerland, from which we abstract those which we presume are more or less familiar to our readers:

I. *Condensed Milk.*

The numbers in the first column represent:

1. Anglo-Swiss Condensed Milk Co., Cham.
2. Swiss Condensed Milk Co., Freiburg.
3. Condensed Milk from H. Nestlé, Vivis.
4. Norwegian Condensed Milk Co., Christiania.
5. New York Condensed Milk Co., (Gail Borden).
6. American Condensed Milk Co.

No.	Water and volatile Substance.	Salts.	Fats.	Albuminates.	Sugar.
1.	26.14	2.05	9.92	11.90	50.80
2.	24.70	2.11	6.02	9.77	57.40
3.	25.75	2.15	10.66	13.41	48.02
4.	25 28	2.03	8.62	10.25	53.82
5.	30.08	2.01	7.54	9.02	51.35
6.	27.72	1.81	8.61	9.92	51.84
	23.38	1.56	9.23	10.22	51.57

Of course, condensed milk is here understood to be that variety which is preserved by the addition of a large quantity of sugar, and put up in air-tight cans.

II. *Farinaceous and other Food for Infants.*

The numbers in the first column represents the following commercial substances:

1. H. Nestlé's Food for Infants, Vivis.
2. Kindermehl of Anglo-Swiss Cond. Milk Co., Cham.
3. Dr. N. Gerber's Kindermehl (Lacto-Leguminose).
4. H. v. Liebig's Malto-Leguminose.
5. Liebig's Kindersuppe.
6. Dr. French's Kindermehl.
7. Dr. Ridge's Food for Children, London.
8. Dr. Coffin's Food for Children, New York.

Nestlé and many others prepare their "food" from baked or roasted wheat-flour, and condensed milk.

No.	Water and volatile Substances.	Salts.	Fats.	Albuminates.	Carbohydrates, soluble and insoluble.
1.	6.36	1.85	4.75	10-96	76.08
2.	7.79	1.46	5 44	8.84	76.45
3.	4-5	2-3	5-6	18-20	65.70
4.	9 42	3.01	1.34	20.47	65.66
5.	40.44	1.71	0.82	8.41	48.61
6.	7.32	2.45	0.26	16.80	74.00
7.	3 98	1.13	1.95	9.05	85.59
8.	8.29	3.02	1.59	17.15	69.94

No. 6 is, according to the German patent, saccharated flour.

No. 7 appears to be only a mixture of various cereals (Gerber).

No. 8 consists mostly of the flour of Leguminosæ (Gerber).—From *Schweiz. Wochenschr. f. Pharm.*, No. 18.

Treatment of Intertrigo in Children (*Deutsches Archiv f. Clin. Med.*)—Dr. A. Wertheimber divides the indications for treatment in these cases into two—1st, to allay the cause, and 2nd, to heal the existing lesions. In speaking of the first, he mentions especially the good effect in cases accompanying dyspeptic diarrhea, of adding to the milk used a not-too-thick solution of barley-water—in the first two months about three to one, then to the fifth month, two to one, and later equal parts. For cleansing he used the ordinary baby-powder, or, when the surface is excoriated, a decoction of bran, not to be dried off. The usual zinc and lead salves he regards as harmful, and for fresh cases praises Hebra's ung. diachyli, while for more severe cases he always uses corrosive sublimate, which he finds always successful in the shortest time. He applies on cloths a solution of one grain to four ounces of water, applying fresh cloths three or four times a day, and letting them remain on for about an hour each time, or even keeping them continuously applied. He has never seen any evil effects from absorption of the sublimate.—*Journal of Obstetrics.*

Demonstration on the Bearing of the Discovery of a Third Corpuscular Element in the Blood—By Richard Norris, M.D. (Birmingham).—Some of the principal points which Dr. Norris thought he had made out in regard to the blood by adopting new methods of examination, and which he demonstrated before the Association, were the following: 1. There exists in the blood, in large numbers, corpuscles which, being of the same refractive index and colour as the liquor sanguinis, are ordinarily invisible. 2. By certain methods of manipulation, they can be rendered visible in the field of the microscope. 3. These corpuscles are really chyle-corpuscles. 4. In the blood, they gradually obtain colour, and become ordinary red corpuscles.

Original Communications.

TREATMENT OF SYPHILIS.

BY R. S. TYRRELL, M.B., L.R.C.P., LOND., ENG.

So much has been written and said of this once dreadful disease that I approach the subject with a feeling of delicacy, and if it were not that I believe in the radical cure of syphilis, if properly treated, I would be very loath to enter on the subject at all, but as so many cases of the tertiary form present themselves from time to time, I feel it not out of place to offer a few suggestions through your valuable journal to my fellow-practitioners, from observations which I have gathered in hospital and private practice.

It is almost universally conceded that iodide of potash and mercury are the two principal medicines in the treatment of syphilis, and I am satisfied that the injudicious administration of one or the other, or both combined, is the cause of the lingering nature of the disease in a great many cases. I fear it is a too common practice to administer iodide of potash and mercury or mercury alone, with a view of combating the different forms of the disease, no matter what the character of the lesions may be. In many cases where one of these drugs would be amply sufficient, the other being combined proves detrimental, and thus the good action of the one is counteracted by that of the other; thus the patient lingers on, neither better nor worse. It would not further my object to consider in detail the therapeutical actions of these medicines, suffice it to say that where the one is beneficial, the other is, in the vast majority of cases, injurious.

Now, should a patient present himself with an ulcer either on a mucous or cutaneous surface, and having satisfied myself that it followed a Hunterian Chaucre or assumed a syphilitic aspect, I at once place him under potass iodide, beginning with gr. v and gradually increasing up to xv or xx, three times a day. Wherever there is a loss of tissue as the result of syphilis potass iodide is the remedy, and mercury in any form will only increase the evil; whereas, in the treatment of nodes or tubercles, or any other form where there is an increase of tissue, mercury and mercury alone ought to be the remedy.

I am well aware that potass iodide will frequently cause the disappearance of nodes, &c., but my experience has led me to believe that mercury will do so in a much more effectual manner, and I have seen potass iodide not only do no good, but aggravate the disease, and I have found that there is no better method of exhibiting mercury than by inunction and per orem combined; ung. hydrargyri well rubbed into the axillæ, morning and night, and calomel administered in ½ gr. doses, three times a day, until the mouth shows indications to discontinue the medicine. This treatment I adopt in all forms of the disease where there is an increase of tissue; and where there is a decrease, potass iodide should be administered alone, or in combination with a little fl. ext quassiæ. I will cite one case to illustrate more plainly what I intend to convey.

N. F——, æt. 45, contracted sore on penis about 15 years previous to coming under my notice, which was followed by evidences of syphilis. At the time he presented himself he was suffering from unilateral palmar psoriasis, and had been for two years previous. This, I think, is generally considered a tertiary form, and I discovered that during these two years he had taken a large amount of potass iodide alone, and also in combination with mercury, which failed to have the slightest beneficial effect. Now, here is a case of hypertrophy of tissue, which potass iodide alone and in combination with mercury failed to arrest. I at once exhibited mercury alone, in the manner I have already described, and in less than one month he had not the slightest trace of disease on his hand. I kept on the mercury until slight soreness of the mouth was produced. It is now two years since he has taken any medicine, and he informed me a short time ago that the disease had not returned, and he had enjoyed excellent health since he was under my care.

I merely cite this case as typical of many that have come under my notice, and trust that my few observations may be of some little benefit to my fellow-practitioners who may meet with long-standing cases.

Translations.

Means of Arresting the Epileptic Attack.

At the *Société de Biologie* on 5th July, M. Brown Sequard said that he had learnt from a negro, that an attack of epilepsy may be arrested by pulling the great toe. Moreover, he had himself verified the correctness of the fact upon twenty-one patients.

An Alcoholic Solution of Tannic Acid in Balano-Posthitis.

In the *Revista de Medicina y Cirugia Practicas* for 7th July, 1879, we observe a notice of three cases published by Sr. Rodriguez Viforcos in the *Revista de Especialidades*. The parts were bathed with a solution of common salt and afterwards dried. Application was then made of the alcoholic solution of tannic acid (equal parts) and cold fomentations ordered to be constantly used. Under this treatment the balano-posthitis disappears completely in four days.

Painful Dorsal Points in Various Affections.

M. Vidal (*Soc. de Biol.*) has made upon several patients interesting observations upon the subject of the pain called *de correspondance* in certain affections. Thus, in simple ulcers of the stomach, the dorsal pain *de correspondance* is always found at the level of the spinous apophysis of the sixth dorsal vertebra. In hepatic colic the pain *de correspondance* corresponds exactly to the fourth dorsal vertebra. Lastly, in perityphlitis M. Vidal has several times established the existence of a painful dorsal point, situated at the junction of the second and third dorsal vertebræ on the left side.—*Le Progrès Médical.*

Quantitive Elimination of the Oxide of Carbon.

At the same meeting M. Gréhant made a communication relative to the elimination of the oxide of carbon in animals which had absorbed a large quantity of it. From his experiment upon dogs he had drawn the following conclusions :—

The elimination of oxide of carbon is very slow, and it lasts a long time. The air expired by an animal which has absorbed a large portion of the gas contains $\frac{1}{10000}$th of this gas. Hence an important practical deduction : if an asphyxiated individual be left in an atmosphere containing $\frac{1}{10000}$th of the oxide of carbon, elimination will not occur. This condition will determine a continuance of the symptoms. But, when in a room the proportion of oxide of carbon has risen to $\frac{1}{600}$th, it is very difficult to succeed, even with the best means of ventilation, in lowering the proportion of the oxide of carbon to $\frac{1}{10000}$th. It is, therefore, necessary above all things to carry the asphyxiated into the open air.—*Le Progrès Médical.*

A Formula for Recent Acne Rosacea.

M. E. Vidal has always obtained the best results from the following, for which he is indebted to his colleague, Dr. Hillairet :—

Distilled water, 150 grammes; rose water, 100 grammes; camphorated alcohol, 15 to 30 grammes; sulphur, 15 to 30 grammes. It is employed in this way: Morning and evening a sponge soaked in this solution is rubbed over the face, the sulphur is deposited on the skin, and when the patient wishes to go out he removes the sulphur, which remains adherent, by means of a very soft brush or a little cotton wool, and then washes with warm water. In some women, whose skin is very delicate, a slight pityriasic desquamation is sometimes produced, and Dr. Hillairet recommends inunction with the following pomade: Glycerole of starch, 30 grammes; oxide of zinc, 2 grammes. The sulphur lotion commonly succeeds in curing completely recent couperoses; if the congestion remain after the disappearance of the pustules, I then prescribe the application of compresses, saturated with this mixture: water, 250 grammes; hydrochlorate of ammonia, 10 grammes. The compresses are applied for 10 minutes, night and morning.—*Lyon Méd. La France Méd.*

On the Mechanism of Accidents Occurring During Anaesthesia.

Following are the conclusions upon this subject arrived at by M. Arloing, and presented

by M. Bonley to the *Académie des Sciences*. When death occurs at the commencement of the inhalation, it is due to reflex arrest of the heart and respiration consequent upon irritation of the nerves of the upper respiratory passages. Later, when the anaesthetic is diffused through the circulating stream, death occurs from arrest of the heart. If the anaesthesia be prolonged, or if the anaesthetic be given in massive doses, poisoning occurs, and death commences by arrest of respiration; arrest of the heart follows more or less closely.

All cases of death observed in practice may, upon mature reflection, be referred to one or other of these three mechanisms. Wherefore, the old precept, "Watch the heart when chloroform is used, the respiration when ether is employed," is not strictly correct for all the stages of anaesthesia. In the first phase the attention should be directed at the same time to both heart and respiration, as well with ether as with chloroform. In the second phase you should scrutinize the heart, and the vigilance should be doubled if chloroform be used. for it is at this period that we are liable to see, especially with this agent, what the surgeons term "Sideration of the patient." In the third stage the respiration should be carefully watched, and as the *dénoûment* of ether intoxication is more sudden than that of chloroform poisoning, the surgeon will do wisely, except in the presence of special indications, to prefer chloroform to ether whenever the operation to be performed will be or may be of long duration; he will thus have more time, before arrest of the heart, in which to combat the symptoms of intoxication.—*L'Union Médicale.*

Thoracic Vibrations in the Region of Pleuritic Adhesions.

At a recent meeting of the *Académie de Médecine, à propos* of a paper on encysted pleurisies, by M. Jaccoud, in which he affirmed the transmission of the thoracic vibrations at the points corresponding to pleuro-pulmonary adhesions, and of the contrary opinion maintained by M. Reynand. M. Guéneau de Mussy (senior) placed the matter in a very clear light. The absence or presence of thoracic vibrations does not depend solely upon the effusion of fluid or upon adhesions which may limit it; many other factors hitherto neglected intervene in these phenomena. Thus all chests do not vibrate equally for all sounds: grave tones are necessary for amply developed chests, and acute sounds for those which are contracted. The former will preferentially throw into vibration the inferior portion of the thorax, the latter will be more perceptible to the hand upon the apex. There is a special tonality to which the maximum of vibrations of a given region of the chest corresponds. M. Guéneau de Mussy profitted by the same occasion to restore to Williams the discovery attributed to Skoda, touching the exaggeration of sonority which the thorax presents above the level of certain effusions. According to him, pulmonary adhesions may sometimes augment the vibrations of the thorax during phonation; sometimes, on the contrary, and this occurs most commonly, they may abolish them. A full inspiration may also, by increasing the intra-thoracic tension, render a chest dull which had remained sonorous in spite of the presence of an effusion.

To sum up, thoracic vibrations perceived by the application of the hand upon the chest certainly possess an importance from a diagnostic point of view, but their interpretation varies with the individual and the degree of tension of the walls of the chest and lungs. Absolute conclusions cannot, therefore, be deduced therefrom.—*Le Praticien.*

On the hard Œdema of the Labia Majora Minoraque Symptomatic of Syphilis.

M. Oberlin has been fortunate in his choice of subject of his inaugural thesis. The work goes to confirm in all particulars the conclusions of a memoir of M. A. Martin upon the same subject, and which appeared in the *Annales de Gynécologie* of last December. We cannot do better than subjoin his conclusions:—

1. There is frequently observed in women affected with syphilis, during the primary and secondary periods of the morbid process, when the phenomena symptomatic of these two phases are developed upon the *labia majora minoraque*, a peculiar lesion of these organs,

consisting in an hypertrophy, having all the characteristics of hard œdema.

2. This hard œdema consists in a considerable augmentation in size of the *labia majora*, whose surface is pale mamillated, and intersected by numerous fissures. Palpation gives to the finger an elastic sensation and does not provoke pain.

3. This œdema extends in some cases to the *labia minora*.

4. This lesion presents the greatest analogy with that which has been described in man as syphilitic phimosis.

5. It consists in an hypertrophy with hypergenesis of the constituent elements of the derm and connective tissue.

6. It is often accompanied by a special form of very hard, rounded, warty looking, sometimes umbilicated papules.

7. Hard œdema of the *labia majora* is a syphilitic lesion; it is not rare, since it is met with at least five times in the hundred in women affected with primary or secondary syphilitic ulcerations located upon the external genitalia.

8. Very few authors have remarked this very characteristic lesion; it has almost invariably been confounded with lymphangitis.

9. The œdema of the *labia majora* persists for a very long time (ordinarily several months) after the cicatrization of the ulcerations which provoked it.

10. General antisyphilitic treatment, assiduously followed and energetically administered (by mercurial frictions especially) alone overcomes the lesion. Local treatment has but slight effect.—*Le Progrès Médical.*

Formularies.

Dr. Richardson's Styptic Colloid (*Hospital Gazette*).—

℞ Acidi tannici, ʒii;
Alcoholis absoluti, fʒss;
Ætheris, fʒiiss;
Collodion, q. s. ad fʒxij.—M.

Whooping-Cough Powders—(Archambault).

Pulverized sugar.. 9 grains.
Musk..... } each ¾ to 1½ grains.
Oxide of zinc .. }

Mix. For one powder, to be given every two hours in the day to a child of three years affected with whooping-cough.

THE CANADIAN
Journal of Medical Science,
A Monthly Journal of British and Foreign Medical Science, Criticism, and News.

To Correspondents.—*We shall be glad to receive from our friends everywhere, current medical news of general interest. Secretaries of County or Territorial medical associations will oblige by sending reports of the proceedings of their Associations to the corresponding editor.*

TORONTO, OCTOBER, 1879.

TO SUBSCRIBERS.

We hope to enclose to each subscriber his account next month. As the bills have all been sent out before, none need wait to receive another before remitting. We don't like this frequent dunning, but our debtors will remember that "our poverty and not our will consents."

CLINICAL TEACHING IN THE TORONTO GENERAL HOSPITAL.

As the season of lectures has commenced in our medical schools we would again draw attention to the very defective character of the clinical instruction given in the hospital. During the last three or four years very great improvements have been made in the old hospital building, and wings of very considerable size have been erected, which, for outside appearance and internal arrangements, will compare favourably with buildings of a similar nature in any part of the world. There has also been a very marked improvement in the care taken of patients, and the many comforts allowed them. So much is this the case that visitors are at once struck with the cleanliness and good order shown in all the departments. It is to be regretted, however, that a similar improvement has not taken place in the character of the clinical teaching afforded. Having a full knowledge of the facts, we have no hesitation in saying that, although of late years some attempts have been made to deliver clinics at a regular hour, the teaching is still very defective, and consequently the attendance of

students is irregular and unsatisfactory. Our object in the present article will be to point out some of the causes of these defects, and to suggest some remedies.

(1) A great cause of the deficiency is the enormous preponderance of what are called didactic lectures. It is quite impossible for a student to attend a hundred didactic lectures on each of the final branches within a six months session, do the requisite amount of reading, and have also sufficient time to give to clinical study. It is very questionable if such lectures are of any very great value to the students, without cases to illustrate the various subjects taught. The remedy for the evil would be to cut down the number of didactic and increase the number of clinical lectures. Sixty of the former might be given with forty of the latter. An objection might be urged here, that in this way the whole subject could not be gone over in one session. How then do they manage in foreign schools where a very much less number of systematic lectures are given? The lecturer could take up more fully the more important parts, and allow the student to read up the remainder from his text book. It is impossible, even in a hundred lectures, to go over the whole of either medicine or surgery minutely and fully.

(2) Another cause of the defect is the manner in which the clinics are given. The patients are admitted into the theatre indiscriminately, and very often both the lecturer and students are thoroughly tired listening to the stories of patients suffering from imaginary ailments, before a case of interest presents itself. The cases should be classified before the commencement of the lecture: those of little or no interest might be admitted down stairs, and the two or three interesting ones brought up to form the basis of a clinic. It would also be of advantage to allow four or six students to remain down with the lecturer, so that they might personally examine these patients.

(3) A third cause lies with the students themselves. A great number take little interest in the cases they see. They will eagerly crowd around to see a rare and difficult surgical operation which they, in all probability, will never be called on to perform, and will turn their backs on a plain case of pneumonia, of which they will constantly meet examples in practice. This inattention might be easily remedied by insisting on practical examinations. The Medical Council has for years threatened to introduce this system, but has really never made an honest effort to do so.

It is also of very great importance that the students, resident in the hospital, should take a deep interest in the cases which come under their notice; that either they or the clinical clerks should keep accurate notes, so that the physician might be made acquainted with every new feature of disease in a certain patient, and thus more effectually instruct the class.

In visiting the wards some new arrangement should be made. It is impossible for fifty or eighty students to follow one physician from bed to bed, and reap any benefit from what they see and hear. They create a great amount of confusion and noise, which must be detrimental to the welfare of the patients. There are now twelve visiting physicians and surgeons on the staff, and if the students were divided in classes of ten for instance, so that each class should follow a certain physician, the bed-side teaching would be more effective, and the confusion would be avoided. At the beginning of each month the classes might be changed around, so that the students would be able to see the practice of the various physicians. There is at present an almost absolute want of appliances for clinical teaching, such as microscopes, instruments for urinary analysis, sphygmograph, &c. Now that the student's fee has been raised to twenty dollars for a perpetual ticket, the hospital authorities might afford to spend a little on these necessary appliances.

These are a few of the points which might be dwelt upon in regard to this important subject. As previously stated, we are under the firm conviction that at present the clinical teaching in the Toronto General Hospital is lamentably deficient; and that the trustees, the visiting staff, and the house surgeon should make it their business to set about a remedy without further delay. An institution so large as to be almost provincial in its character,

falls far short of its design, when satisfied with looking after the welfare of the patients, it allows students to go out into practice, who have never had an opportunity of obtaining a thorough and practical knowledge of their profession.

CANADA MEDICAL ASSOCIATION—WYETH AND BROS.' EXHIBIT.

At the late meeting of the Canada Medical Association, Messes Wyeth Bros., the well-known pharmacists of Philadelphia, had on exhibition, through their agents, Perry Davis, Son & Lawrence, of Montreal, samples of their elegant pharmaceutical preparations, which are now so well known throughout Canada, and to which we had occasion to refer in our last issue.

CANADA MEDICAL AND SURGICAL JOURNAL, MONTREAL.—We are informed that arrangements have been completed whereby this Journal will in future be edited by Drs. George Ross and W. A. Molson. It is now intended to bring out each number punctually on the 15th day of every month, instead of the 1st, as heretofore. We wish the new management every success.

QUOTATIONS FROM THE TALMUD ON MEDICAL MATTERS.—Mr. Magnus, Sen., of Berlin, publishes in the *Deutsch. Archiv f. d. Geschichte d. Medicin* (1879, p. 240) the following passages from the Talmud:

At the head of all diseases am I, the Blood; at the head of all remedies am I, the Wine.

Eat hearty: You will feel its effects when walking.

A drop of cold water mornings (in the eye), and washing the hands and feet in the evening, are better than all eye-salves.

Before a distant physician may arrive, the eye may become blind.

Badly off is the town whose physician has the gout, and whose oculist only has one eye.

Honor the physician before you need his services.

A physician who makes gratuitous cures is of no account.

The door, which is closed to prayers for alms, opens for the physician.

Book Notices.

Emotional Prodigality. By C. FAYETTE TAYLOR, M.D. New York.

Observations on the Mechanical Treatment of Disease of the Hip-joint. By CHARLES FAYETTE TAYLOR, M.D.

Method for performing Post-mortem Examinations, North Carolina Board of Health, Raleigh, N. C.

Addendum to the Controversy on Chronic Spasmodic Stricture or Urethrismus. By F. N. OTIS, M.D. New York.

Transactions of the Thirty-Fourth Annual Meeting of the Ohio State Medical Society, held at Dayton, June 3rd, 4th, and 5th, 1879.

Transactions of the Medical and Chirurgical Faculty of the State of Maryland, 81st Annual Session, held at Baltimore, April, 1879.

Transactions of the Medical Society of the State of Tennessee at its 46th Annual Meeting, 1879, Nashville, Tenn.

History of the Discovery of Anæsthesia. By J. MARION SIMS, M.D., M.A., LL.D. From *Virginia Medical Monthly,* May 1877. Richmond, 1877; New York, 1879.

A New Removable Paper Brace for the Treatment of Caries of the Spine, and of Lateral Curvature, by the insertion of a Rubber Band to exert continuous pressure over the Deformity. By AP MORGAN VANCE, M.D., Junior Assistant, Hospital for Ruptured and Crippled, New York.

A Manual of Midwifery, for Midwives and Students. By FARNCOURT BARNES, M.D., &c., &c. Philadelphia: Henry C. Lea. Toronto, Hart and Rawlinson, 1879.

This little book has been somewhat coldly received by some of the critics, but we rather like it. The style is clear and concise, and

much better adapted to the comprehension of the student during his first year than the more pretentious standard works.

The descriptions of the mechanism, the stages and management of labour, are the simplest and most clear we have seen, and we fancy many students will avail themselves of its pages during their first course. It is written professedly for midwives, and if they could be induced to master its details there would be a vast amount of suffering and injury saved to womankind. In regard to the treatment of complications, the author is hardly explicit enough; but he always advises the reader to send for qualified assistance in such cases, and, therefore, in a manual of this kind perhaps greater detail is not necessary.

We must, however, take exception to the statement that the child is not viable before the 250th day of gestation, as well as the assertion that in hourglass contraction the constriction is usually at the internal os, and that the plate taken from Tyler Smith shows the cavity of the cervix below. We must remember that the cervix does not develop into a cavity, as Tyler Smith taught; and therefore, after delivery of the child, it is impossible to have a cavity formed below the internal os uteri as large as that plate represents.

Again, in the treatment of thrush, we decidedly object to having the spots *rubbed* with anything. All applications should be made as gently as possible with a feather or camel's hair brush.

We are glad to see that the author has corrected the plates representing the head in the different obstetric positions, for those in Hodge, Tyler Smith, and Playfair have always been incorrectly numbered.

It is probable that this, like many other manuals, is but the prelude to a large work and if so, we hope the author will retain the simple and clear style of his maiden effort throughout the more complete and pretentious volume.

The book, as far as it goes, is well worth the attention of students, and will help to the understanding of those principles and precepts which they find so difficult. The work is got up in the publisher's usual beautiful style.

Manual of the Principles and Practice of Operative Surgery. By STEPHEN SMITH, A.M., M.D., Surgeon to Bellevue and St. Vincent Hospitals, New York. pp. 662. Illustrations, 733. Boston: Houghton, Osgood & Co. New York: 21 Astor Place. The Riverside Press, Cambridge, 1879.

Through the courtesy of Messrs. Houghton, Osgood & Co., we have received an advance copy of this work, which thoroughly fulfils the author's endeavour to "embody the teachings of recognized authorities on every subject, so far as they conform to what is believed to be the present standard of surgical opinion and practice." With the exception of the surgery of the organs of special sense, the subject of operative surgery is discussed in an exhaustive and masterly manner, and profusely illustrated; many of the illustrations being specially drawn for the work, others being derived from works on surgery, medical periodicals, and manufacturers of instruments. In these days "of making many books there is no end," but of the recent medical works published, we have met with none that so amply justifies its publication as this Manual, which is really a "*multum in parvo*" guide to all the operations a surgeon may be called upon to perform, and to the treatment of all surgical diseases and injuries. The character of the work necessarily renders any detailed review impossible, and we shall content ourselves with describing briefly the able manner in which the subject is dealt with by one of the best American surgeons of the day. Chapter I. treats of Principles, under the heads of (ä) The Obligation, The Examination, The Preparation, The Hœmorrhage, The Anæsthesia, The Operation, The Emergencies, The Dressing, Applicances, Repair and Cicatrization, and is full of valuable instruction, concisely, but clearly and exhaustively given. Then follow chapters on the Osseous, Muscular, Circulatory, Nervous, and Tegumentary Systems; the Digestive, Respiratory, Urinary, and Generative (male and female) Organs, and the Surgery of the Extremities, the latter treating of Amputations, Deformities, and Compensative Appliances. A copious index of 27 pages helps to make the work complete in every sense of the term. It should find a place on the table of every practitioner, for he can gather from it all the aid that books can give him in the immediate treatment of surgical diseases and injuries. The copious illustrations, if sometimes lacking in elegance, make up for that in accuracy, and in no small degree contribute to the attractiveness and usefulness of the work.

Meetings of Medical Societies.

ANNUAL MEETING OF THE CANADA MEDICAL ASSOCIATION.

The Canada Medical Association held its Twelfth Annual meeting at London, in the Victoria Hall, on September 10th and 11th. A goodly number of members were present and evinced a warm interest throughout the proceedings. The list contained twenty-five papers which were to have been read, in addition to the reports of the various committees appointed last year. The great number of papers and reports and the length of some of them prevented many from being read, and curtailed the opportunities for discussion to which it is the object of these papers to give rise. The length of time at the disposal of the association is too limited, but was made the most of on this occasion.

The session opened promptly on the morning of the 10th. The President, Dr. J. D. Macdonald, of Hamilton, being in the chair. After a few remarks, in which the President alluded in a cordial manner to the presence of distinguished visitors from the United States, the reports of the various committees were presented.

Dr. Bucke, of London, then read a most able and exhaustive essay upon "Alcohol in Health and Disease." He went over the ground carefully and minutely, and his views not being accepted *in toto* by the Association, gave rise to considerable and animated discussion. A unanimous vote of thanks was accorded the reader for his most excellent paper.

The nominating committee was then appointed, with Dr. Bucke as chairman. The remainder of the morning session was taken up with routine business and finally adjourned until 2.30 p.m.

The afternoon session opened at 2.30. After the reading of the minutes, the President delivered his address, for which he had chosen the subject, "Sick Hospitals; to what extent are these structures required, and how are we to get them?" The paper was replete with useful hints, and showed a thorough appreciation of the wants of the profession in this respect and of the benefits that the public derive from hospitals.

Dr. Leaming, of New York, followed with a paper upon "Pleuropneumonia." The description of the morbid lesions of this disease was particularly good, and was drawn principally from *post mortems* on cattle killed for this disease, in New York. He advocated large doses of calomel in the treatment.

Dr. Goodwillie, of New York, then read a paper on "Hinderances to Respiration from disease of the Nose," exhibiting and explaining the uses of an instrument which he had devised for their treatment.

Dr. Burns, of Toronto, read a paper upon "Registration of the Conditions of Health;" and Dr. Workman, of Toronto, upon "Placenta Previa," which was, as all his writings are, careful, thorough, and scholarly.

The session was resumed in the evening at 8.30, by the reading of a paper by Dr. Grant, of Ottawa, upon "Dermoid Cysts of the Ovary." The subject was discussed from both a medical and surgical point of view.

Dr. Rosebrugh, of Hamilton, read a long paper on "Uterine Fibroids," which showed a close acquaintance with the authorities.

The meeting then adjourned.

On the morning of the 11th, after the reading of the minutes, Dr. Osler, of Montreal, gave a description of the anatomy of the brain, illustrating his remarks by specimens of the brain preserved by Giacomini's new process. The specimens were beautifully preserved retaining their form and colour, whilst being firm, hard, and smooth. The various convolutions were marked out, and Ferrier's centres traced carefully upon one specimen. Dr. Osler was most highly complimented upon his patient labour and his most interesting and instructive remarks.

Dr. Buller, of Montreal, read notes of two cases of iritis, in which he had injected pilocarpine hypodermically.

Dr. Holmes then read a paper upon the action of cold as antagonistic to the febrile state.

Papers were afterwards read by Dr. Playter, of Toronto, upon "Therapeutics and Materia Medica;" Dr. F. W. Campbell, Montreal, on "Duodenal Ulcer," and Dr. Hingston, Montreal, on "Lithotrity." The Treasurer, Dr. Robillard,

presented his report, showing a balance in favour of the Association.

Dr. Botsford, of St. Johns, N.B., moved that Drs. Robillard and Oldright be a committee to bring before the notice of the Dominion Government the subject of weekly reports of weather and health.

The Report of the Nominating Committee was then adopted, which recommended that the next meeting be held in Ottawa, on the first Wednesday in September, 1880. Also the following officers and committees :—

President—Dr. Howard, Montreal.

Vice-Presidents—For Ont., Dr. Hill, sen., Ottawa; for Que., Dr. F. W. Campbell, Montreal; for N.S., Dr. Atherton; for N.B., Dr. Parker.

General Secretary—Dr. David, Montreal.

Treasurer—Dr. Robillard.

Local Secretaries—For Ont., Dr. Wright, of Ottawa; for Que., Dr. Ross, of Montreal; for N.B., Dr. Allison; for N.S., Dr. Wickwire.

Committee of Arrangements :—Drs. Sweatland, Grant, and Wright, of Ottawa; with power to add to their number.

Publication—Drs. Osler, Fenwick, and Campbell, of Montreal.

Medicine—Drs. Wright, Ottawa; Adam Wright, Toronto; and Harrison, of Selkirk.

Surgery—Drs. Roddick, Atherton, and Burritt.

Obstetrics—Drs. J. H. Burns, Gardiner, and Black.

Therapeutics—Drs. Daniel Clark, Medcalfe, and Stevenson.

Necrology—Drs. Edwards, Campbell, and Fulton.

Education—Drs. Hingston, Graham and Burgess.

Climatology—Drs. Oldright, Larocque, and Botsford.

Ethics—Drs. Macdonald, Hingston, Robillard, Parker, Grant, Botsford, Marsden, Bucke, Clark, and Osler.

The Association then adjourned for lunch, at the Asylum.

About one hundred persons sat down to a sumptuos lunch in the theatre of the asylum. After doing full justice to the bounteous repast, and numerous patriotic and other toasts had been proposed and replied to, and the asylum pretty thoroughly inspected, the members of the Association returned to London.

The afternoon session was occupied by the report on Necrology, by Dr. Fulton, Toronto; papers on Post Partum Hæmorrhage, by Dr. Tye, of Thamesville; Dilatation of the Stomach treated with the stomach-pump, by Dr. Ross, Montreal; and Meningocele, by Dr. Roddick. Dr. Hanson, of Hyde Park, delivered an address upon the "Changes in the Treatment of Disease during the past thirty-four years." A committee composed of Drs. Mullin, Sloan, and Osler, was appointed to look into some financial questions. Finally, votes of thanks were passed and the meeting adjourned until Sept., 1880.

In the evening a magnificent dinner was offered to the members of the Association by the Medical Profession of London. This took place in the Tecumseh House, and was attended by a large number of guests, who enjoyed themselves thoroughly.

THE TORONTO MEDICAL SOCIETY.

The Toronto Medical Society held its regular fortnightly meeting in the Ladies' Parlour of the Mechanic's Institute, on Thursday evening last, the President, Dr. Workman, in the chair.

After the reading of the minutes, Dr. Alt presented an eye affected with purulent cyclitis, phlyctenular ulcer and cataract, which he had removed on account of sympathetic ophthalmia of its fellow.

Dr. Graham followed with the details of a case of exophthalmic goitre of fifteen years' duration; and Dr. Reeve narrated the history of a case of cataract, associated with diabetes, in which exposure to cold upon the Fair Ground, at our recent Industrial Exhibition, was promptly followed by symptoms of acetonæmia—or, as Prof. Saunders and Mr. Hamilton, of Edinburgh, will have it, pulmonary fat embolism—and a fatal termination ensued within thirty-six hours.

Dr. Adam H. Wright then read an excellent paper upon "Hypertrophy of the Prostate," presenting the various forms of catheter recommended in this affection. After some discussion, and the doctor's replication, routine business was transacted, and the Society adjourned to meet again on the 9th inst. The subject for discussion at the next meeting is "Cystitis," Dr. McPhedran being reader of the paper.

Miscellaneous.

Canadians in England.—Luke Teskey, M.B., has been admitted a member of the Royal College of Surgeons of England.

Death of M. Chassaignac.—We regret to hear that M. Chassaignac, to whom surgery is indebted for the introduction of the drainage-tube into practice, died on August 26th. He had for some time retired from active life.

Treatment of Ingrowing Toe Nail.—Dr. Andrews gives the following operation, as that of a chiropodist, named Willard :—" He never extracts the nail nor slices off the overlapping flesh, but cuts out a narrow ellipse of tissue near the nail and parallel to its border, claiming that the border itself, where it rests against the edge of the nail, has its special structure adapted to its location, and ought not to be sacrificed. The removal of the strip of flesh being accomplished, he brings the edges of the wound together with fine sutures, thus drawing the border away from the nail and effecting a cure."

Elementary Mechanics ; Its Place in the Curriculum.—At the meeting of the General Council of Medical Education and Registration of Great Britain, a motion was unanimously adopted, " That the subject of elementary mechanics,— of solid and fluid — meaning thereby mechanics, hydrostatics, pneumatics, and hydraulics, be no longer recommended by the Council as an optional subject of preliminary education, but be recommended as one of the subjects, " without a knowledge of which no candidate should be allowed to obtain a qualification entitling him to be registered, it being understood that the examination in this branch may be passed either as preliminary or as first professional."

Change of Diet.—A member of the sanitary police force came across a boy the other day who was wheeling home a load of oyster cans and bottles, and curious to know what use the lad could put them to he made a direct inquiry.

"Going to throw them over into our back yard," replied the boy. "I took two loads home yesterday."

"But what do you use 'em for?"

"It's a trick of the family," grinned the lad.

"How trick ?"

"I'd just as lief tell," continued the boy, as he spit on his hands to resume his hold on the barrow. "We're going to have some relashuns come in from the country. We may not have much to eat, but if they see the cans and bottles and boxes they'll think we've had isters, champagne, figs and nuts till we've got tired of 'em and are living on bread and taters for a healthy change!" The officer scratched his ear like a man who had received a new idea.—*The Sanitarian.*

A Pen Worth Recommending.—We have been favoured with samples of the celebrated Spencerian Double Elastic Steel Pens, and after trying them feel justified in highly commending them to our readers. They are made of the best steel, and by the most expert workmen in England, and have a national reputation for certain desirable qualities which no other pens seem to have attained in so great perfection, among which are uniform evenness of point, durability, flexibility, and quill action. It is thus quite natural that the Spencerian should be preferred and used by professional penmen, in business colleges, counting rooms, government offices, public schools, and largely throughout the country. Indeed, so popular have they become, that of the " Number One " alone, as many as eight millions are sold annually in the United States. The Spencerian Pens may be had, as a rule, from any dealer ; but, when not thus obtainable, the agents, Messrs. Alexander Buntin & Co., 345 St. Paul Street, Montreal, will send for trial, samples of each of the twenty numbers on receipt of twenty cents.

The Arrangement and Distribution of the Muscular Fibres of the Rectum. By J. G. Garson, M.D. (London).—In this paper, Dr. Garson showed that the rectum and bladder are united together by the longitudinal muscular fibres of the gut. The distance that the bladder and rectum are adherent may be divided for purposes of description into two

parts, an upper and a lower. Of those, the upper is the longer. Here the two organs are united only by areolar tissue, and can be easily separated from one another; but at the lower part, the anterior longitudinal fibres of the gut, which are closer together on this than on other parts, as they pass downwards over the front of the rectum, are reflected (in the same way that the peritoneum is) from it to the bladder, and are distributed over the posterior surface of that viscus. The rectum and bladder are, therefore, firmly bound together, not only by areolar tissue, as is generally stated, in anatomical works, but also by muscular fibres. This arrangement of what Dr. Garson terms recto-vesical fibres does not appear to have been previously described; at least, it is not mentioned in the principal works on the anatomy of the bladder and rectum.—*British Medical Journal.*

Narcotism from Nutmeg.—Mrs. N., aged thirty-eight, mother of four children, was confined on Sabbath morning, June 29th, 1879, at nine o'clock. The child was a girl, and the largest I have ever seen; weight fourteen and one-half pounds. Labour natural and easy. Had a light spasm after the last pain. The spasm was hysterical. On the 30th the "old women" persuaded her to take nutmeg tea. One and a half nutmegs were used in making the tea and she drank it during the day. About ten p.m. she began to get drowsy. By four o'clock the next morning she was in a profound stupor. At ten a.m. the narcotic effects of the nutmeg began to die out, and by four p.m. she had pretty well recovered. The symptoms were about the same as those produced by opium and the remedies were the same. I mention this case for the reason, that nutmegs are in such general use as a condiment, that we may lose sight of their dangerous narcotic tendencies. In twenty-one years' practice I have never seen such a case before, and and if I had ever known that the nutmeg possessed such properties, it had completely escaped my memory, and for fear some of our numerous professional brethren may be in a like condition, I have deemed it proper to mention this case.—*St. Louis Clinical Record.*

J. B. Mattison, M.D., of Brooklyn, N. Y., in the *Quarterly Journal of Inebriety*, summarizes as follows in regard to treatment of opium inebriety: "Granted a case suitable for treatment, this method may be summarized as follows: Opiate reduced, at once, to one-half or two-thirds usual quantity. Subsequent gradual decrease and entire withdrawal in seven or eight days. Mercurial cathartic, first night, followed by daily laxative enemas, or Hunyadi water. Bromide of sodium, 60 grain doses, increased 30 grains daily, ter in die, in six or eight ounces of water, on empty stomach, continued 5 to 7 days. Restlessness following opium abandonment met by hot baths, 100° to 110°, ten to thirty minutes each, often as required. Bromide eliminated by diuretics—digitalis and nitre, and diaphoretics—hot and steam baths. Insomnia relieved by chloral, combined, if need be, with Indian hemp or hyoscyamus. Diet exclusively milk and lime water first three days of opium abstinence. Full diet resumed soon as possible. Debility removed by generous living, general faradization, strychnine, iron, quinine, etc., with out of door exercise and varied social enjoyment." —*American Practitioner.*

Moral Dietetics.—Dr. Bock, of Leipzig, writes as follows on the moral effect of different articles of food and drink:

"The nervousness and peevishness of our times are chiefly attributable to tea and coffee; the digestive organs of confirmed coffee-drinkers are in a state of chronic derangement, which reacts on the brain, producing fretful and lachrymose moods. Fine ladies addicted to strong coffee have a characteristic temper which I might describe as a mania for acting the persecuted saint. Chocolate is neutral in its psychic effects, and is really the most harmless of our fashionable drinks. The snappish, petulant humor of the Chinese can certainly be ascribed to their immoderate fondness for tea. Beer is brutalizing, wine impassions, whiskey infuriates, but eventually unmans. Alcoholic drinks, combined with a flesh and fat diet, totally subjugate the moral man, unless their influence be counteracted by violent exercise. But with sedentary habits, they produce those unhappy

flesh sponges which may be studied in metropolitan bachelor halls, but better yet, in wealthy convents. The soul that may still linger in a fat Austrian abbot is functional to his body only as salt is to pork—to prevent imminent putrefaction.

A Practical Reformer.—An occasional protest is raised against the extravagance of funerals, but no one seems to inaugurate the reform which few will deny is desirable. Doctors are as much interested in this reform as any. People who consider the undertaker's bill a debt of honour, and who will scrape and save to pay it, are not at all distressed about the doctor's bill. Possibly if the relicts could be persuaded to lavish less wealth on the dust of the "dear departed" they might find it less difficult to settle for the medical attendance. A doctor recently died in England, who, doubtless, often felt, as we all have, the senselessness of the extravagance of modern funerals, and took a sensible and practical means of working a reform. He believed that this reform, like charity, should begin at home, and the following are the provisions of his will, touching his interment: "There is to be no wake whatever. My brothers and sisters, with their children, are to be the only persons admitted while my body is laid out. No clergyman is to be invited to my funeral: as they do not attend the burial of the poor, they shall not attend mine. No crape, gloves, cypruses, hat bands, or such emblems of mourning, to be made use of at my funeral. The cost of my coffin shall not exceed £1. The money thus saved, amounting to over £60, shall be distributed among the poor of the village of ———, where I have lived for the last thirty-three years."—*Mich. Med. News.*

Persistence of the Canal of Muller in a Boy aged Six.—In the March and April number of the *Journal de l'Anatomie et de la Physiologie*, M. Rémy describes the *post mortem* appearances seen in the genito-urinary apparatus of a child who died in the Hôpital des Enfants, Paris, of cystitis and suppurating kidneys, the result of chronic retention of urine. In front of the right ureter, another canal was found: it began as a *cul-de-sac* among a mass of little cysts close to the suprarenal capsule, and passed downwards under the fundus of the bladder, opening into the utricle of the prostate by an aperture which would admit a large probe. Passing between the muscular and mucous coats of the bladder for some distance before reaching the utricle, it raised the mucous membrane close to the neck of the bladder to such an extent as clearly to have been the cause of fatal retention of urine. The urethra was perfectly free from stricture. This abnormal canal was evidently Müller's duct, and the cysts at its upper end represented the remnants of the Wolffian body. As the duct opened into the utricle, the homology of that depression to the female uterus is practically confirmed by this case. But Waldeyer's theory, that the hydatid of Morgagni represents a remnant of Müller's duct, is shaken by the fact that a well-formed hydatid existed on the right testicle in this instance where the duct was so complete. The presence, too, of an "organ of Giraldès" over the right epididymis, although very distinct remnants of the Wolffian body were found far from the testicle, at the upper end of the duct, tends to disprove Giraldès' opinion that the little structure which bears his name consists of the remnants of the Wolffian body. The malformation in M. Rémy's case was perfectly unilateral.

The Effect of Smoking upon the Teeth.—At a recent meeting of the Odontological Society of Great Britain, Mr. Hepburn read a paper on this subject; and the results of his investigations on the subject are contrary to what is, we believe, the popular notion. He considers that the direct action of nicotine upon the teeth is decidedly beneficial. The alkalinity of the smoke must necessarily neutralise any acid secretion which may be present in the oral cavity, and the antiseptic property of the nicotine tends to arrest putrefactive changes in carious cavities. In addition, he is inclined to believe that the dark deposit on the teeth of some habitual smokers is largely composed of the carbon with which tobacco-smoke is impregnated. It is this carbon which is deposited upon the back part of the throat and lining

membrane of the bronchial tubes; and with whatever disastrous effect it may act in these situations, he thinks we are justified, from what we know of its antiseptic properties, in concluding that its action upon the teeth must be beneficial. Moreover, this deposit takes place exactly in those positions where caries is most likely to arise, and on those surfaces of the teeth which escape the ordinary cleansing action of the brush. It is found interstitially, in all minute depressions, and filling the fissures on the coronal surfaces. It may be removed with scaling instruments from the surface of the enamel, but where it is deposited on dentine, this structure becomes impregnated and stained. Indeed, it is only where the enamel is faulty, and there is access to the dentine, that any true discoloration of the tooth takes place; but it is remarkable, he says, how the stain will penetrate through even minute cracks, provided the necessary attention to cleanliness be not exercised. The staining power of tobacco-oil may be seen when a deposit has taken place on the porous surface of tartar collected on the posterior surface of the inferior incisors. In this situation a shiny ebony appearance is occasionally produced. That tobacco is capable of allaying, to some extent, the pain of toothache is, he thinks, true; its effect being due, not only to its narcotising power, but also to its direct action upon the exposed nerve; and he is inclined to attribute the fact of the comparatively rare occurrence of toothache amongst sailors, in great measure, to their habit of chewing. He has been struck, in the case of one or two confirmed smokers who have come under his notice, by the apparent tendency which exists towards the gradual production of complete necrosis of carious teeth, and the various stages of death of the pulp, and death of the periosteum taking place without pain or discomfort to the patient. This condition may, of course, be brought about by a variety of influences; but in these special cases he is inclined to think that the presence of nicotine in the mouth has acted powerfully. The experience of other speakers in the subsequent discussion appeared to corroborate that of Mr. Hepburn, except that Mr. Oakley Coles thought the frequent changes of temperature probably injurious and tending to produce cracking of the enamel, and Mr. Arthur Underwood thought that smoking to the extent of injury to digestion tended to cause recession of the gums and otherwise to injure the nutrition of the teeth.

Put Money in thy Purse.—A favourite theme with the medical-commencement orator is that ours is a profession and not a trade; the object of a trade being to make money and of a profession to do good to mankind. If it be meant by this that one is not liable to make money by the practice of physic, it is all very well; but if it be meant that one does not and ought not to try his best to do so, it is balderdash.

When any one enters upon the study of medicine he has precisely the same object in view which has the mechanic's apprentice or merchant's clerk. He means that his work as as soon as possible shall gain him a livelihood; he hopes for independence thereafter, and until he is chilled by disappointment has occasional visions of fortune farther on.

It is the sheerest nonsense to tell young men, and often old ones, too, who have raked and scraped their means together, and perhaps mortgaged their futures, to undergo the hardships of the benches and the perils of a student's boarding-house, that they have done so to fit themselves for a purely missionary work. They know that it is not so, and it is highly honourable that it is not so. "He that does not provide for his own household is worse than a heathen," were the words of one who also declared that "the greatest of these is charity."

The words of St. Paul are nowhere more applicable than to the profession of medicine. He knew full well that without money half the usefulness of the doctor is gone. He who is ever on the alert with the gifts of his services—or, what is a more common error, is careless in demanding proper recognition for his work—sins trebly—against himself, against his profession, and especially against those whom he thinks he serves. It may be his own affair when the doctor wrongs himself—albeit that besides money he loses, too, in respect—and if his wife's gown be faded, and if his children be out at elbows, it is her back and their arms and his eyes that are most offended; but he who enters the profession of medicine has duties to perform to the guild he has chosen.

Shall he always have money for his work? Shall he demand the full fees of the schedule irrespective of the condition of his patient? By no means. Such a declaration would be as silly as it would be inhumane. While all the giving of this world is not committed to the doctor, he has—especially if he be young—a special heritage in the poor, without whom clinics would stop and practice be a matter for graybeards only. But this is his opportunity, and he performs but his duty to himself when he embraces it. And again, while all the courtesies of the world are not committed to the doctor, he has his share to perform, and

should do it gladly, rendering his services cheerfully and delicately to those who must not pay; and so, too, shall he bear his part as a citizen, says the Code, and lend his services to the public good in proper matters for his concern. These are the doctor's duties. It were cant and coarseness to call them charities. For these, too, has he ample opportunities—more than most men—in his daily life, among rich and poor and high and low, not in doing and giving only, but in sympathizing with distress, in bearing with human weaknesses, in conquering himself.

The doctor has no right to lower his profession in the eyes of the world, and so injure its usefulness. He who is careful in his business affairs, and charges those who are able to pay and should pay the full measure for his services, and sees to it that they are paid for not by suits, which are abominations, but by educating his people to pay, may gain the name of closeness, but really he is doing far more to raise his profession in the world's respect than the slipshod fellow who lets his bills go by from laziness, from lack of method, or from fear of giving offence. Not good-hearted, but rather chicken-hearted is he. We cannot alter the laws which make money or labour the unit of values. See how vain it is when the poor wretch for whom you have done your best saves from his miserable earnings a fee to pay not you, but another, whose skill must be better, for it costs to get it. We cannot change human nature, for witness the seemingly astonishing abuse and detraction which is given in return for unpaid services by way of asserting independence, and see how low is our profession held by public officers, when they see how the unpaid positions of doctors in the public service are eagerly sought for by members of the profession. "What do I care for doctors," said an astute ruler, "when I can buy them for a dollar a head?" A dear price, we are sad to think, it would be to pay for some.

And if the doctor—not through carelessness or ignoble fear of offence, but instigated by higher motives of supposed charity—do not demand his dues, grossly is he mistaken in the amount of good he does. We will not stop to consider the harm that is done by indiscriminate free medicine in destroying the independence—pauperizing the souls—of those who accept it; that is a well-worn theme; but point we for a moment to the valuelessness of free medicine. Whatever the amount of skill that is shown, no matter what care is given, it is a rule that free medicine loses in its effect. If there be some who in the nature of things do not pay for our services, it is their misfortune. The poor do not recover like the rich, and one reason is that among the comforts they are denied is that of paying the doctor, Our most brilliant successes are certainly not among those who by courtesy are exempt from our fees; nay, it is even a misfortune, so far as health is concerned, for this patient to be joined to us by family ties, and thus be forced to escape our bills. Twenty years did the obstinate Fatima withstand the faith of her husband, Mahomet, though millions who paid for his ministrations found comfort in his train.

What, then, is the end of this? Plainly, that we shall not make a charity of our business or business of our charity, no less for the good of our patients than of our pockets. Let us not deprive them of a single chance for their welfare when we can help it, and keep steadily in view that not by drug alone, but by ducat, is health regained.

The most important therapeutical law which has been enunciated since quinine came in was made by Mr. Tuke, when he declared that imagination and the unseen forces "should be yoked to the car of Phœbus Apollo," and made to do their part in hauling that life-machine out of the ruts in which it may have fallen. As great, too, is the force of money in view of the prospect of pay. It quickens the faith of him that gives it, unlocks stores of wisdom in him that receives. Would that these words could reach a very important party in the action. To him whom we can address, however, do we say it—put money in thy purse when you can, my brother, that the world may respect us and that our ministrations may not fail.—*Louisville News.*

APPOINTMENTS.

B. L. Bradly, of the village of West Flamboro', Esq., M.D., to be an Associate Coroner in and for the County of Wentworth.

Dr. John Harley has been appointed physician to St. Thomas Hospital, in the room of the late Dr. Murchison.

Charles A. Jones, of the village of Mount Forest, Esq., M.D., to be an Associate Coroner in and for the County of Wellington.

Births, Marriages, and Deaths.

BIRTHS.

At Penetanguishene, on September 17th, the wife of Dr. P. H. Spohn, of a son.

MARRIAGES.

At Bloomfield, on July 30th, A. C. Bowerman, M.B., to Ida E. Bedell.

DEATHS.

At Clarksburg, on Sept. 17th, Carrie A., wife of Dr. R. H. Hunt.

At Toronto, on Sept. 17th, Dr. Blume, late of New York city, aged 42 years.

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(See Transactions of American Medical Association, for 1876, page 176.)

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TORONTO, NOVEMBER, 1879.

Selections: Medicine.

DIARRHŒA AND ATHREPSIC ERYTHEMA OF THE NEWLY-BORN.

(PARROT.)

(Translated for the CANADIAN JOURNAL OF MEDICAL SCIENCE.)

The diarrhœa of young children and especially of the newly-born, to which we are exclusively directing attention, is not a disease, it is not an affection, for it cannot be connected with any fixed organic condition: it corresponds to very different modalities of the digestive functions, and is met with in very different lesions of the intestinal tube. We cannot absolutely look upon it as a disease; it is only a symptom, only a clinical fact which is observed by the bedside of children, and we will study it only in this point of view, entirely limiting this lecture to the diarrhœa of the newly-born, in no wise wishing to write a chapter on general pathology, and reserving our study to the diarrhœa of very young children and especially of the newly-born. We will then limit our study to a practical point of view, and consider diarrhœa only at the age at which we are observing it, that is to say in the three first months of extra uterine life.

Let us begin our study with that of normal intestinal dejections. In the little new-born child, immediately after birth, we find first a very peculiar special excrementitious product, meconium (from the Greek μηκωνιον, poppy juice, to which it bears a certain analogy). Meconium exists after the end of the third month of uterine life, but at that time it presents a different aspect. It is only at the fifth month that it takes all the characters which we find in it at birth. During the three days which follow the birth, the child passes some meconium. It has the appearance of an unctuous, pasty, pitchy matter, coming out in the form of a small pudding, spreading over the buttocks, and on the sheet, and intimately adhering to it like pitch, and when we remove the coverings from the little child we separate them only with difficulty. The meconium itself stretches like an elastic band, before separating from them.

It presents a very dark green tint, sometimes blackish. It contains no solid matters. To the touch as to the sight it is a soft and unctuous substance. It rarely persists beyond two or three days. Towards the end it is already mixed with a clearer yellow matter, and less unctuous to the touch: the meconium is about to finish.

As to its constitution: it contains more than 700 parts to 1,000 of water, and an enormous quantity of mucus and epithelium from the stomach and especially from the intestinal tube, which appears to be the first body which constitutes the meconium. This epithelial waste would irritate the surface of the intestine and would provoke afterwards an exaggerated secretion of bile, which, in fact, exists there in large quantity, likewise well marked by its colouring matters and biliary acids. Salts in quite large quantity are also found.

We may here be asked, how it is that meconium is accumulated thus from the third month without being eliminated into the amniotic waters. Now it cannot get out of the intestine, because, to expel fecal matters a certain effort is necessary, and for this effort

the child must respire: so when it is in the free air and has respired, this effort is made and meconium expelled. Some is passed at times even during the course of the labour, but it is by pressure coming from the mother and exercised indirectly upon the body of the fœtus during labour.

Let us now pass to the study of normal stools, properly speaking. They are something quite special, they have a peculiar aspect, yellow, the yellow of buttered eggs, as well to the sight as to the touch. They are not humid but they are unctuous. They have no odour. They are in number two, three—rarely four in the twenty-four hours. They are not solid and formed, but spread themselves out slightly, forming small limited masses. They are made up of a large quantity of colouring matters of the bile, which gives, to them their fine bright yellow tint, and which are but little altered, according to Lehmann, since they have preserved their reactions. We find afterwards some casein which has scarcely been attacked by digestion, also fatty particles of milk and a small quantity of epithelium. Lastly, a very large quantity of microphytes of micrococcus are found there, which exist in the most normal stools, and which it would be very necessary to be careful of considering as causes of alterations when we will meet them also in great quantity in various pathological stools.

Let us name now matters of transition which are not really more normal, although most physicians and mothers are generally contented with them. They are already pathological: they no longer have the same degree of consistence—dryness and homogeniety. They are a little more fluid, less unctuous, less coloured, more acidulated, and, in contact with the air, they become green spontaneously: this is a pathological indication.

The pathological motions present different special characters. We can state precisely their number. It varies according to the quantity expelled at each stool. There are some children who have a great number of them—ten, thirty—because at each suckling, at each movement, they have a small stool. Their consistence is fluid to very different degrees; they spread themselves out and cover a great surface of the linen; a portion of the bed is also spotted by the intestinal matter properly speaking, and around these spots is seen a wet liquid, colourless, zone, which must not be believed due to the urine, but which is wet by the water, which comes from the intestinal tube, and which separates itself from the solid matter. At that time it is necessary to be very careful in attributing to an abundant flow of urine what we have already pointed out as a sign of good health. The spots made by the urine do not form so regular a zone, and are seated on the most anterior parts of the bed.

The colouration of these pathological motions differs sometimes very little from the yellow tint: it is always whiter and duller. Usually they turn green in contact with the air, though sometimes they do not. They are made up in the beginning of small masses, of small striæ of green in the midst of the yellow matter. The green becomes more and more marked. At a more advanced stage the matter is altgether green, like sorrel or spinach. This greenish matter is mucus, coloured green by the colouring matters of the bile. At a later stage, of a prognosis much more disastrous, the yellow and green stools are mingled with grains of undigested milk. At times even they are wholly composed of this badly digested milk, and of white milky grains: this is a veritable lientery.

The constitution of the motions is the same as that of the physiological state; as soon as the green matter has appeared it is almost always contained in the mucus; we see in it beads of adherent mucus, tenacious, and almost transparent. There are some cases entirely made up of substances of this nature. These are cases in which the children suffer enormously. We will not enter into a discussion of the nature of this green matter. Some have thought that it was blood exuded and thrown out into the intestinal tube. This is not admissible, for we would find traces of the blood globules. It doubtless proceeds from the liver, from the colouring matter of the bile. At all times these stools are not more bilious than other stools. It is more just to distinguish them by the name of green stools; although we do not wish to discuss here if they come from the biliary colouring matters, altered or not.

The odour of the stools is an important sign to consult. In the normal state it is almost nothing. The transition stools have an acid sourish odour of sour milk. Sometimes this odour is marked and becomes penetrating; at times they are fetid and gangreuous, especially when the pathological stools contain many grains of undigested milk. It appears that this milk, not elaborated by the intestinal juices, has undergone a kind of putrefaction during its sojourn in the intestinal tube. This odour then impregnates all the bedding, clothing, &c.

It is also interesting to attend to the state of the child at the time he is passing these motions. For a normal motion, the child at first becomes pale; this is the commencement of the perception of the fecal bolus: when the expulsion effort is made the face is congested, and becomes turgid and red; the child strains, but without suffering, and he evinces a veritable satisfaction when he has unloaded the intestine. A green diarrhœa, on the contrary, is accompanied by pain, a true colic; the countenance is contracted, the features drawn, the child utters a prolonged cry, even until the exit of the fecal matters. Satisfaction then follows this pathological stool just as the normal.

We will not here take up the pathological anatomy of these stools, nor anything connected with the rest of their pathological study. Let us say only, that, however bad the stools may be, at the autopsy we find no lesion to account for them. The intestine is diseased hardly once in two or three hundred cases. We may then repeat that diarrhœa is a symptom, not a disease.

This diarrhœa, which is the effect of numerous causes, in turn becomes the cause of another alteration, of *athrepsic erythema* of the new-born. This erythema (which must be distinguished from the *sudoral* erythema of little children, which is very frequent during the hot season) is a rare affection beyond the third or fourth month. It is essentially constituted in the beginning by a slight redness of the skin, which is slightly raised and crowned by a vesicle surrounded by a red areola. They are formed very rapidly by tens of thousands: then they are confounded in such a manner that we can no longer recognize the elementary lesion save at the periphery of this patch, where we always distinguish the initial vesicle.

These vesicles appear in divers points. Let us examine them where the skin is dry—on the anterior region of the thighs for example. The redness diminishes a little, the vesicle bursts, there remains an epidermic desquamation, a whitish scale, leaving an epidermic flange and a red space. This may be observed above all on the periphery; for where the skin is the seat of a continual irritation, the grouped vesicles are confounded, the desquamation is no longer made regularly and the cuticle is removed by scratching; there only remains large red surfaces, where we can no longer recognize either vesicle or areola. It seems then that the skin is varnished; it is a brilliant red, as if its most superficial layer had been taken away.

These parts are painful, but much less so than we might think, except in cases of ulceration when syphilis must be thought of. Children attacked with erythema suffer most from intestinal colic.

Relative to its seat, erythema is found in the immense majority of cases only in certain fixed points, towards the ischiatic region of the buttocks, at the posterior and superior region of the thighs, and at times, but later, in the legs. We see then on the buttocks large red surfaces, and on the periphery small vesicles,—this is the character of erythema. However we find it at times elsewhere, on the trunk, and on the face even more frequently than on the trunk.

Erythema is not a disease having an independent existence; it is met with only in children attacked with athrepsy. Two indispensable elements are necesary for its development, an alteration of nutrition and scratching. If it were developed only by the one or the other of these elements we would find it in another seat; it would be produced on the entire surface of the body. It is never observed in healthy children: after it has appeared there is certainly a morbid trouble already present. Athrepsy may yet be present only in a very slight degree, but it already exists and threatens the child. This may then be a very useful manifestation for the physician, since the erythema appears after the beginning of the morbid evolution.

Erythema never leaves cicatrices.

This is a most important fact to know in order to make a diagnosis.

This diagnosis is not always easy. I pause to recall to you that once I mistook for this erythema the erythema of *variola*. In an analogous case, the elevated temperature, which should already be reached in the congestive period of variola, ought to make the diagnosis clear, for in athrepsic erythema the temperature on the contrary is hyponormal.

Sudoral erythema has not the same situation. It is especially spread over the face, neck, and trunk. It presents a less intense redness.

The vaccinal roseola is very ephemeral; it is constituted by large papules, slightly raised. There are no vesicles in it, or they are disseminated and very large. It is seldom observed but on the superior extremities, not often on the trunk.

We have studied the diagnosis of the *syphilides*, with which we will avoid confounding erythema. The colouration of the syphilides, which is always dominated by a violet tone, is very remarkable and characteristic.

Erysipelas presents large, red surfaces, swollen and œdematous.

As to the cause of this erythema we ought no longer to look upon it, with Valleix, as a manifestation always due to thrush. There may be erythema without thrush. There is no necessary connection between these two affections. They are frequently concomitant, because they are both a manifestation of a more general disease.

Before terminating, let us fix our attention on the *anatomical lesion* of the skin attacked with erythema. There is always in erythema, essentially and primitively, an alteration of the epidermis, and of the mucous layer of Malpighi. On the contrary, the syphilides always comprise alteration of the derma. There is only very rarely in erythema a slight muscular proliferation in the derma. This appears only after a very long irritation, and is then followed by a cicatrix. There is a cicatrix only when the derma has been altered; everything which attacks the epidermis alone does not produce them. This is why erythema leaves no cicatrix.—*Gaz. des Hôp.*

ACUTE RHEUMATISM—THE SALICYLATE AND ALKALINE TREATMENT OF, CONTRASTED—ABSTRACT.

BY DAVID W. FINLAY, M.D., AND R. H. LUCAS, M.R.C.S., MIDDLESEX HOSPITAL.

* * * * *

In estimating the effect of any drug at the bedside, it is necessary, firstly, to review a fairly large number of cases, and, in the second place, to take care that those cases are placed under similar conditions. The results we have to show are those of an analysis of 158 typical cases of acute rheumatism treated in the Middlesex Hospital—60 by salicylate of soda, 60 by the old alkaline method, and 38 by a combination of alkalies with quinine. All of these cases, with the exception of the drug administered, were treated in a precisely similar manner, and influenced by the same surroundings.

* * * * *

For purposes of easy comparison we append a summary of the results arrived at in a tabular form. It should be noted that the usual dose of salicylate of soda was fifteen grains every three hours; of the alkalies, fifteen grains of the bicarbonate of potash, with a like quantity of the acetate, every 4 or 6 hours; and, of quinine, where this was regularly given, two to five grains in pill, thrice daily.

No. of cases.	Treatment.	Average duration of Pyrexia.	Average duration of joint affection.	Signs of Endo. or Pericarditis on admission.	Ditto developed under treatment.	None at any time.	Relapses.	Return of pain without Pyrexia.	Average stay in Hospital.
60	Salicylate.	5·7 days.	5·06 days.	41 cases, or 68·3 per cent	7 cases, or 11·6 per cent.	12 cases, or 20 per cent.	16 cases, or 26·6 per cent.	6 cases, or 10 per cent.	29·7 days.
60	Alkaline.	10·3 days.	12·2 days.	41 cases, or 68·3 per cent	4 cases, or 6·6 per cent.	15 cases, or 25 per cent.	5 cases, or 8·3 per cent.	4 cases, or 6·6 per cent.	27·7 days.
38	Alk. with quinine.	11·6 days	10·07 days.	20 cases or 52·6 per cent	5 cases, or 13·1 per cent.	13 cases, or 34 per cent.	3 cases, or 7·8 per cent.	7 cases, or 18 per cent.	31·1 days.

—*London Lancet.*

REMARKS ON "PAIN IN THE SIDE."

BY EDWARD C. JANEWAY, M.D.

Pain in the side is a common enough expression on the part of the patient to a physician, and in the absence of any febrile manifestation, the patient is probably not infrequently dismissed as suffering from neuralgia, myalgia, disordered stomach or liver. What I purpose in this article is to draw attention to deeper causes which may be of light or grave import. We should never rest satisfied with the statement that the patient has neuralgia or myalgia, but should endeavour to ascertain the hidden source. Hence it is necessary to examine carefully the site and limitations of the pain, as well as the conditions which bring it into play. I believe that it is a wise plan to cause every male patient so complaining to strip to the waist, in order that a more critical examination may be made, and to do the same for the other sex with the exception of a light dressing sack or a chemise. We are thus prepared for a careful exploration of the lungs if that should be necessary. Next let the patient define the site of the pain, and if it is brought about by any special motion, let this be illustrated as far as practicable. We should study the position which the individual is in the habit of assuming in any occupation at which he may be engaged. If we find that a patient has the three tender points which are characteristic of intercostal neuralgia, we must avoid stopping there. The questions to be decided are: Is this due to some injurious influence affecting the body, as the malarial poison, lead, insufficient nutrition, brought about by dyspepsia, too little food; or excessive discharges, as prolonged lactation, abuse of sexual function, diabetes, etc.; or by some alteration of fluids by disease, as in gout, Bright's disease. Or on the other hand, is it due to some local cause, as an aneurism, Pott's disease, gummy growth or some form of tumour compressing the nerves within or without the spinal canal. It may seem to some of the readers that I have unnecessarily extended the list of conditions to be thought of when examining a patient, but I have in reality fallen short, for I have left out of account affections of the spinal cord itself, which usually produce double-sided or girdle pain. So also it may be claimed do aneurism and Pott's disease. I have, however, within the last month seen three cases which illustrate the necessity for this care with reference to these diseases. The first had been treated for six months for intercostal and cervical brachial neuralgia, which an examination showed to be due to an aneurism of the transverse arch pressing upwards behind (?) the innominate artery.

The second had Pott's disease but had been treated for four months for intercostal neuralgia, and disordered liver; the pain being in the lower intercostal nerves and particularly on the right side. An examination of the back revealed a marked angular projection in the lower dorsal spine. These two of recent date will perhaps suffice, but I could strengthen the position by reference to a number of cases of aneurism and some of Pott's disease which had been overlooked, the pain being considered as indicative of neuralgia only. But to show the necessity for a careful examination still more strongly, it would simply be necessary to refer to histories of patients with leucocythæmia of splenic type. Pain in the left side has been in several cases that have come under my observation, the first symptom of the disease, and as far as the patients' words can be relied on, they had been under treatment for neuralgia or some other disease which might be productive of pain in the left side. A corollary from this would be that with pain in the left side in the region of the spleen, a microscopic examination of the blood might give an early revelation of a disease which is usually recognized at a date too late for any material benefit to the patient. For those who are not in the habit of making this examination I would state, that all that it is necessary to do is to prick the finger, previously pressed below, with a sharp needle or pin, receive the drop on the cover, and transfer this immediately to the slide, and examine with the microscope for excess of white globules. But let us suppose that we have excluded anything like aneurism, Pott's disease, or leucocythæmia. We will still have to consider the possibility of a sub-acute pleurisy. I recall at this moment the case of a physician consulting me about pain in the left side, in whom a careful exam-

ination failed to reveal the cause for a neuralgia, yet three days later the physical evidences of pleurisy were manifest. At this early stage then we may have pain only with characteristics of neuralgia or pleurodynia, and that without fever; for in the case I mention, the temperature carefully taken was 98¼° F. The obvious inference from such an example is that it is wise to re-examine in all doubtful cases. But pleurisy causes pain in the side not only in its earlier but also in its later stages where firm adhesions have formed and the nerves are implicated in the thickened pleura. So that we are obliged to think of this latter possibility also. Perhaps it is more common for people to imagine that they have phthisis because of a pain in the side than for phthisical patients to have pain in the side as the most prominent symptom, yet I can recall some cases in which I have discovered phthisis when the patient had come to me simply out of sorts and troubled with a pain in the side. Such a case of quite remarkable character I saw quite recently in a gentleman who consulted me about a pain in his side which he supposed was of little moment, and neuralgic. The whole right lung was useless to the patient, the pleura thickened, and the lung indurated. I could scarcely convince the gentleman that there was anything special the matter with his chest. Such cough as he had he imagined due to a nasopharyngeal catarrh. This is of course a prominent illustration, but minor grades are by no means infrequent. So also with heart disease, many more people imagine that they have it on account of some pain in the left side than are found to be victims of the malady, having been examined by a physician in consequence of such pain. Yet the examination of the heart is so easily performed that it is wise to include it in our search. We should also question the patient with reference to the urine if we do not make an examination of it. Judging from the number of times which I have found a spleen adherent to the diaphragm and its capsule thickened, I believe that this is at times a cause of obscure pains in the left side. I have thus far examined in vain cases which I thought were possibly of this nature for a perisplenic friction sound. The only conditions under which I have heard friction sound over the spleen have been when the organ has been considerably enlarged, and I am doubtful whether it is possible to hear a friction sound due to roughening of the capsule of a normal sized spleen. There is an occasion for pain on the right side of an obscure character, which I believe to be entirely overlooked. I have seen a number of cases at the post mortem table in which I felt that the strong probability was that they had experienced obscure pain in the region of the lower border of the liver in the neighbourhood of the gall bladder. In these cases I have noticed adhesions of the gall bladder by peritoneal folds to the colon or duodenum, usually without any evidence that such folds were of inflammatory origin, but rather developmental. Last week such a one came under my notice where the adhesson was to the transverse colon on its upper and anterior portion, and a slight traction on the intestine served to stretch the gall bladder. I suppose that it has fallen to the lot of the majority of practitioners to be consulted about dragging pains in this vicinity, which they were unable to explain, and I offer this as an excuse for a certain number. I have made such diagnosis on several occasions, and have seen no reason to regret it. The fact is, I do not see how pain could have been well avoided in some of these cases during active peristaltic movement.

As my intention, announced at the beginning of the article, was simply to draw attention to causes for pain in the side that might be overlooked, and which experience has showed me were overlooked, I desire the reader to consider this fragment in this light. That other causes exist for pain in the side I am aware, but a short journal article is hardly the place for their full consideration.—*Hospital Gazette.*

METALLO-THERAPY.—Prof. Charcot is said to have greatly modified his views on this subject. Dr. Yandell, writing to the Louisville *Medical News*, mentions that Prof. Charcot had said to him that he did not deem metallo-therapy of any practical value, but that it was a curious subject well worthy of study.

ON BENZOATE OF SODA IN DIPHTHERIA.

Letzerich says, (*Berl. Klin. Woch.*, No. 1, 1879) that he has repeatedly given this drug in diphtheria, and has always found it to answer very well. He attributes his success to the antiseptic properties of the drug, by which the development of the diphtheritic bacteria is arrested. He also points out that it is a most effective remedy in infantile, gastric, and intestinal catarrh, and in mycotic (fungous) catarrh of the bladder. In short he fully corroborates Professor Klebs' statement when he says that in Benzoate of soda we possess a very powerful remedy in all affections arising from the presence of contagious matter in the system. The following is the author's method of administering the drug: R. Natr. benz. pur., 5 grammes, solve in aquæ destillat., aq. menth. pip., āā 40 grammes; syr. cort. aur., 10 grammes. Infants under one year were given a desertspoonful every hour. Children from one to three years old must take a larger dose, viz., a tablespoonful every hour, the proportion of the benzoate of soda being also increased from 5 to 7 or 8 grammes. To patients from three to seven years old, 8 to 10 grammes are given; to those over seven, from 10 to 15 grammes. Adults should take from 15 to 25 grammes in the same solution, the proportion of the solvents and the syrup remaining the same. The diphtheritic membranes were powdered with benzoate of soda, in severe cases once in three hours; in lighter cases, from two to three times daily. A solution of the strength of 5 per cent. forms a very efficient gargle for older children.—*Lond. Med. Record.*

Pass and Pluck.—From the annual report which has just been published by the Council of the Royal College of Surgeons of the number of candidates who have presented themselves before the board of examiners in Anatomy and Physiology during the collegiate year 1878-79, it appears that, out of 785 examined, 530 were successful, and 255 rejected. At the Court of Examiners during the same period, 509 were examined, of which number 345 received their diplomas of membership, and 164 were rejected.

Bandaging in Migraine.—Dr. Weir Mitchell (in the Boston *Medical and Surgical Journal*), relating a case of migraine occurring in a girl seven years and a half old, exhibiting the congestive type, and for which he prescribed small doses of bromide (gr. iij.) and tinct. belladonnæ (gtt. iij.), observes that the use of the old domestic remedy, a tight bandage, during the attack, is useful. He employs a rubber bandage, applied thoroughly from the eyes up, with a thin pad over each temporal artery, if the temporal ridge be sharp enough to keep the bandage from squeezing the arteries, and over the two occipital vessels. Instead of caoutchouc, a well-applied muslin bandage may be put on, and then wetted, using compresses over the temporal arteries. The comfort thus given is sometimes surprising. He adds, "I need not say that migraine in some of its forms becomes at times—and especially in women—a most disabling malady, and may recur daily until life is a burden impatiently borne. These are usually cases of thin-blooded and thin people, whose sufferings are brought back by the attempt to take exercise, without an abundance of which a return to health is out of the question. I have seen some such cases in which a cure little less than marvellous has been made by the use of absolute rest, overfeeding, and massage. There is, of course, much more to be said on the therapeutics of megrim, but no one drug is its master. The hint as to thorough bandaging is worth remembering, and especially at the close of a headache."

A little French girl was greatly frightened during a late thunder storm, and for a time her parents had their fears awakened as to her recovery from the shock. The electric fluid, it seems, passed very close to her. For a moment she seemed to be suffocating, but the sensation soon passed off into a fit of hiccoughs. These became so distressing that after three days her mother took her to the Children's Hospital, in Paris for advice. The surgeon ordered her to the operating theatre, where, on seeing the medical man standing at a table covered with some awful looking instruments and surrounded by a number of assistants in white aprons, the child became so terrified that she forgot her hiccough, and she was thus cured.

Surgery.

CLINICAL LECTURE ON MALIGNANT STRICTURE OF THE HEPATIC FLEXURE OF THE COLON.

BY JAMES F. GOODHART, M.D.

Assistant Physician to Guy's Hospital and the Evelina Hospital for Children.

The case to which I invite your attention, gentlemen, to-day is one of stricture of the colon; but, in order that those of you who know little about such things may follow me the more readily, it will be advisable, in the first place, to mention the common symptoms of intestinal obstruction, and also the various causes of the same.

The symptoms are vomiting; griping abdominal pain; constipation; more or less distension of the abdomen; abnormally visible peristalic action of the bowels; and possibly, in some cases, diminished quantity of urine.

According as the obstruction is sudden and complete, or slow and for a long time incomplete, in its onset, you can readily understand that the symptoms will be likely to differ. Thus, in sudden cases, the vomiting and constipation are immediate, and the abdominal distension follows soon after. In the chronic cases, there is usually a history of paroxysmal colic for some time before the ouset of more urgent symptoms. The abdominal distension slowly increases, and reaches an extreme degree, and the vomiting and absolute constipation come on at this late period. Moreover, throughout the illness, the visible muscular action is usually a prominent symptom. This is, I think, the simplest division of intestinal obstruction—into acute and chronic; and you will find that the various forms are readily classified in this way for clinical interpretation. It is not very elaborate, and therefore proportionately liable to error for exceptional cases; but it is correct for the majority of cases. Some writers attempt to classify according to the seat of the disease; this comes very much to the same thing, but is not quite so simple.

The following causes are usually enumerated:

1. Plugging of the intestine by foreign bodies and concretions.

Acute. { 2. Internal strangulation. 3. Volvulus.

Acute or Chronic. { 4. Intussusception.

Chronic. { 5. Contractions. 6. Strictures.

Of these six, the first, except when due to a large gall-stone, is very rare, so that need not detain us. Nos. 2 and 3 are associated with very acute symptoms, early vomiting, pain, and distension of the abdomen. Intussusception occupies a somewhat intermediate position, as it is sometimes acute, sometimes chronic; and five and six have usually chronic symptoms.

The case is that of a man aged 27, admitted into the clinical ward on May 22nd, 1878, and who died on May 31st. He was an Irishman, born in Killarney, and had had no illness that he was aware of, with the exception of measles, and, four years ago, of gonorrhœa. His father and mother are alive and healthy. He has drunk very freely of spirits and beer, being for some time a bottler of whiskey, when he used to imbibe more than half a pint *per diem*. From Killarney, he went to a sugar-factory at Bristol, where he used to drink considerably more than three quarts of beer in the day. During the last twelve months, he has not drunk nearly so much, only taking spirits at long intervals, and about a quart of beer per day. During the last nine months, the patient has suffered from attacks of griping pain in his right side, more especially after taking beer; he has never noticed that the pain was increased by food; and he has been so little troubled by it as to take not much notice of it.

About two months ago, he caught a bad cold, and was confined to his bed, and treated by a medical man. He then first noticed a hard swelling in his right side, just below the ribs. Previously, he had felt in good health, and had been able to work and eat well. He now began to have pain in this spot; and, though he got better of his cold, and began to work again, he felt weak, and his appetite failed. A month ago, he was seized with severe pain in his right side, and for two days his bowels were confined. This attack passed off, but only to be succeeded by another in a

week's time. The pains generally came on in the evening, and, after lasting twenty-four or thirty-six hours, would go away. During the pain, he was always sick, and, in so doing, was relieved. The vomit was bilious, green or yellow. Sickness never came on immediately after food, nor has he ever thrown up any blood, but the ejecta have been of the nature of coffee-grounds. The vomiting has only existed for the last four weeks. The bowels have been irregular, at one time constipated, at another loose. The motions have lately been very black. He thinks he has wasted in the last three weeks. He has been able to take solid food till the last week, but since then has kept to milk and brandy.

When admitted, he is described by my clerk, Mr. Malpas, as of a dark sallow complexion, slightly jaundiced, with worn, pained, and somewhat pinched-looking face. He lies in bed on his back, with his legs drawn up; this being his most easy position. His tongue was furred and moist. He was always thirsty, but quite without appetite. The bowels had acted not long before he came in.

The abdomen was not at all distended—rather the reverse; so much so, that a tumour now to be described gave a slight prominence to the surface immediately over it. It occupied the right hypochondrium and right umbilical region, extending for an inch below the umbilicus. Its lower edge was well defined, but not its upper; the whole mass very tender and very hard. It was comparatively dull, but yet distinctly resonant on percussion, and between it and the right rib there was very distinct resonance; above this, came the hepatic dulness as usual, extending half a space higher than its normal limit. The swelling moved but very little, if at all, during deep inspiration. The pain came on in paroxysms, and, during them, the tumour became visibly more rounded, but there was no visible peristalsis. All the viscera seemed normal, and the temperature was normal. There was no ascites; no jaundice worth the name; no enlargement of the surface veins.

These, gentlemen, are details of this case, wanting only that which no description can give—the something over and above the mere symptom which the eye takes in at once, and which is often all-important in making the diagnosis. However, I do not know that there was anything very striking in this man's appearance except that he was very pale, and looked proportionately ill. Will any one suggest a diagnosis?

Well, first of all, what may the symptoms indicate? A hard, somewhat nodulated lump between the umbilicus and the right ribs. In that region are the liver, gall-bladder, pylorus, head of the pancreas, the hepatic flexure of the colon, and, behind these, the suprarenal capsule and kidney, and some lumbar glands; and, lastly, mesentery and omentum may be displaced anywhere, and therefore must be mentioned Bear in mind, too, that spinal curvature—lordosis, as this form is called—will sometimes so push forward the pancreas and aorta as to simulate an abdominal tumour or aneurism. To remember this is to make your diagnosis so far as it is concerned; because it is, of course, easy to examine the length of the spine; and, when there is curvature of one part, there is nearly always curvature of another part compensatory. This patient had no spinal curvature.

Then to take the other possibles *seriatim*. Had he any liver-affection? What liver diseases are liable to occur in a young man of twenty-seven? First, there is hydatid disease, which has these features: that the tumour is cystic; that, therefore, it gives the physical signs of fluid, viz., a thrill—in some cases, a peculiar thrill—and the globular elastic tumour, generally speaking, bulging well into the right hypochondrium. It is a swelling comparatively free from pain. It is associated with little or no disturbance of the health. These are conditions, you will observe, which do not tally with those in this case. The tumour was not cystic, but very hard and unyielding. It was not even globular; nor did it occupy the region of a hepatic cyst; and, instead of being unassociated with disturbed health, the man, as I have told you, was evidently very ill. In these latter points, however, it might agree with the symptoms of hepatic abscess or suppurating hydatid; but then, again, these would give the same cystic

bulging of the liver if they gave any sign; and it was not present. Then some syphilitic disease of the liver—was it that? Syphilis leads to the formation of large hard masses in the liver, which produce much matting of the surrounding parts, and therefore occasionally give rise to a good deal of pain; so that it might have been something of that kind, even though there were no other traces or history of anything of the kind. And, lastly, was it any malignant growth in the liver? Well, that is so exceedingly uncommon as a primary disease in anybody; and in a young adult of twenty-seven still more so, that any opinion of that sort was mentioned only to be dismissed. So, then, of all the possible affections in the liver, we have only one left, viz., some gummatous inflammation. But I did not think it was a mass connected with the liver at all; first, because the tumour itself was distinctly resonant; and, secondly, because there was still more marked resonance between the lump and the ribs, above the margins of which came the normal hepatic dulness in due course. You occasionally find a large liver coming some way below the ribs, overlapped by or covered by some intestine; so, that, though really enlarged, the abdominal portion is hidden; but I never saw a liver covered above by intestine and protruding below; and, if you think a minute, such a condition is hardly possible considering the relation of the intestine to its mesentery. Such a condition is just possible with regard to the gall-bladder; that the coils of intestine might enfold that viscus, and become adherent round it, giving resonance above it, and some transmitted resonance over it; and the gall-bladder is rather liable to set up inflammation round it, and fever. It becomes over-distended, and inflamed because over-distended. But I did not much think this was gall-bladder, because distension of the gall-bladder in young people is usually associated with some jaundice, and this was not; for though Mr. Malpas tells you the man was jaundiced, I think it would have been more correct to leave the earlier report, that the complexion was *sallow*, without the addition. He was sallow no more. Then, too, the fundus of a distended gall-bladder is not often adherent to the surface to such an extent as to produce a lump so defined as this was. It is a pyriform elastic swelling, to be felt only with care. Then, too, both liver and gall-bladder descend freely during inspiration; this tumour did not; though of course that symptom is liable to be modified by adhesion, should this have occurred.

Then we may take kidney and suprarenal capsule; and I may at once lay down this rule, that, unless very large or abnormally mobile, enlargements of these viscera do not produce any well-defined tumour so superficial as this was. A man may have twenty or thirty ounces of kidney in each loin, instead of four or five; and, unless there be any special renal symptoms, the tumours will very probably not be detected. This is because they are behind all the coils of intestine, and push these forward, so that the swelling is masked in this way. Renal tumours are indicated by a general fulness of the abdomen, or ill-defined resistance in either lion; and then, on careful manipulation, you will get fluctuation and so on. Now go and verify this for yourselves in the case of 19 in Philip ward. There is a man who has had symptoms of renal calculus on the right side. Go and examine his abdomen; and you will have learnt a lesson you will not forget. The same thing applies to the suprarenal capsule, though less generally, because growths in it of any size are apt to push forwards towards the median line, and may appear as definite tumours well defined, by pushing up the pancreas in front of them. As an outside chance, I put down tumour of the suprarenal capsule.

We have now left the pyloric region of the stomach and colon, omentum, and mesentery. The pancreas may be left out of the question, because I might say the same of it as Sir William Gull used to say here of the jejunum, "that it has no pathology." That is a fact, though, worth your thought. Sir W. Gull used, I say, to take the ileum, jejunum, and duodenum, and enumerate the disease of the first and the last, and find nothing to score against the jejunum. That is so; the jejunum is but rarely diseased primarily; and what is true of the jejunum is true of the pancreas, so far as we

know at present; its diseases are not numerous. As between the remaining possibles, I said this: First, that the paroxysmal griping pain associated with vomiting that this patient suffered, and also the visible swelling of the abdomen which occurred at the seat of the tumour, together with the resonance over the tumour, were proof of some matting of the intestine, and so an impediment to its healthy painless muscular action, or else of some positive obstruction. There was, however, no distension of the abdomen, and the bowels, though not regular, were not confined; so I thought there could be no obstruction of anything more than a temporary kind; and under such circumstances, intussusception or any malignant disease of the colon were hardly likely. I therefore turned to the stomach, the patient being a young man, and a former hard-drinker and suggested that he had some ulcer there, which had, as do so many gastric ulcers, slowly perforated into the tissues outside; making its way downwards and to the right, instead of backwards; and that the inflammatory thickening so set up, had caught the intestine, and led to the paroxysmal colic. That was my diagnosis; but, in making it, I had to do some violence to two sets of facts. The first was remarked upon by some of you, viz., that the man had no symptoms of gastric ulcer. To this I replied, that gastric ulcer gives so few symptoms in many cases, that the absence of them is not to be relied upon, especially in hospital patients, who take so little heed of their symptoms; and, moreover, this man had had "coffee-grounds" vomit, and paased black stools—very like gastric hæmorrhage. Secondly, the swelling in the abdomen was so hard, that I was strongly disposed to think it must be a new growth of some kind; and I also remarked that you must bear in mind that growths in the stomach and intestine do occur at earlier ages than most other growths; and I mentioned the case of a woman which is on record, where carcinoma of the stomach caused death at twenty-one.

Closer than that there was no ground for going; and, upon that diagnosis, and the prominent symptom being the one of paroxysmal colic, we gave him half a grain of opium three times a day, and kept him on milk diet, hoping that by this means the muscular coat of his intestine would go to sleep, and let the supposed ulcer or inflammation subside. Unfortunately, he was already, only we could not see it, in a hopeless condition; but let me continue the report of the case.

(*To be continued.*)

Superfluous Hair.—Sir, In answer to your correspondent "Medicus," as to the treatment for removal of superfluous hair from the face and hands, I made the same inquiry, after repeated trials of various treatment, and the use of all the well-known depilatories, in an obstinate case of general hirsuties. I find that, if the growth be localised and the hairs few, the best method is to remove each hair by the tweezers, and to insert a three-sided needle into the follicle, completely destroying it, as suggested by Dr. Bulkley in the *Archives of Dermatology* (New York, October 1878, vol. xiv., p. 4). If the hair be general and over large surfaces, a preparation of liquor potassa and spirits of wine in equal parts carefully brushed over the affected parts twice a-week, and the parts to be well washed afterwards, say with Pears's soap. This method has proved most successful in a series of cases in which I have applied it. This method was mentioned also by Dr. Cairns Wicks, in the *British Medical Journal* of July 26th last.—I am, sir, yours truly, James Startin, Surgeon to St. John's Hospital for Skin-Diseases.

Supra-pubic Lithotomy.—1. In children supra-pubic lithotomy is preferable to all other methods of operating. (2.) In adults, supra-pubic lithotomy will be found very useful in many cases. (3.) A catheter must never be allowed to remain in the bladder after the operation. (4.) The vesical suture, which has been recommended by Latzbeck and others, after supra-pubic lithotomy, ought to be applied if possible. In this case dressing the wound must be treated strictly antiseptically. (5.) Much importance not to be attached to statistics which seem to prove that lithotrity is preferable to lithotomy.—(Prof. L. E. Van Godoever.)

PSORIASIS PALMARIS.

I can corroborate, from my own experience, the statement made in the *Journal* of June 7th by Dr. McCall Anderson, that there are three affections of the palms and soles which closely resemble each other, viz., eczema rimosum, simple psoriasis palmaris, and the so-called syphilitic psoriasis palmaris, and that, therefore, no absolute statement can be made, as Dr. Spencer suggests, that "there is no such thing as psoriasis palmaris except as a syphilide," although everyone will agree that simple psoriasis of the palm is exceptional. With regard to the syphilitic affection, there is one diagnostic point that has not been alluded to in the *Journal*, which is often a help in doubtful cases; and that is, that the syphilide almost invariably begins in the centre of the palm, while the two diseases which so closely resemble it do not, as a rule. Even here, however, no absolute statement can be made. I have a patient at the present time attending the skin department of University College Hospital, with well marked simple psoriasis affecting the trunk and usual situations; and, since he has been under treatment, a thickened, scaly condition appeared on the ball of the thumb close to the centre of the palm, which has yielded to a strong application of cantharides. The patient is a robust, healthy-looking young man, without the least evidence of syphilis, and there were no patches of psoriasis on other parts of the hand. Two years ago, a man was attending the skin department with an eruption upon the palms of the hands, consisting of circular well-defined patches about one-third of an inch in diameter, covered with fine silvery scales. There were one or two on the sides and backs of the fingers, but none elsewhere. Similar spots on other parts of the body would have been unhesitatingly pronounced to be psoriasis, and the eruption was not at all like its syphilitic namesake. He had had several previous attacks, always on the hands; strenuously denied syphilis, about which he had had previous inquiries, and the eruption was cured by treatment suitable for simple psoriasis.—H. Radcliffe Crocker, M.D.

In reference to Drs. Spender's, Liveing's, and McCall Anderson's very instructive papers on psoriasis palmaris, I may state that I am in the habit of recognizing five distinct diseases that are wont to occur on the palm or sole without other parts being necessarily simultaneously involved, and which may present a not very dissimilar appearance—namely, eczema, psoriasis, syphilis, lichen ruber, and erythematous lupus. I have frequently met with psoriasis in this situation as part of the general non-syphilitic disease, often in gouty subjects, and with no co-existing eczema. There is also a form of palmar psoriasis, to which the late Mr. Nayler first called my attention, and which, for the sake of distinction, he was in the habit of designating "non-specific palmar psoriasis." In these cases, the skin of the whole palmar surface of the hand, fingers, and thumb is red, thickened, and hard, and the natural furrows of the skin occupied by small white scales, so that the whole surface is mapped out with fine white lines. No cracks nor fissures are present; and the part is always dry and harsh, and generally hot and irritable. The condition may exist with or without psoriasis in other situations, and nearly always occurs in women. I lately saw a typical case. A girl, a teacher in a school, was admitted at the Hospital for Diseases of the Skin with psoriasis of the nails of both hands, and a few patches of the same complaint on the arms, the palmar aspects of whose hands were affected as described. The eruption in all parts had always been dry and scaly, and had existed two years. A rash which, by the patient's description, was probably psoriasis, had shown itself at intervals in other parts from an early age. There was no history of syphilis. Though in lichen ruber it is unusual to find the eruption only on the palms of the hands, I have seen it fade and disappear in other parts, while some evidences of it have remained on the palms.—Wyndham Cottle, M.B., F.R.C.S., Savile Row.

In hospital practice, I see numerous cases of all three varieties—namely, eczema palmaris, psoriasis palmaris, and syphilitic psoriasis. The differential diagnosis seems to me most easily made by the following characteristics:

Syphilitic palmar psoriasis may be diagnosed: 1. By its certain syphilitic constitutional history; 2. By the circumscribed appearance usually assumed in this eruption; 3. By the minute pearly glistening nature of the epidermic scales over a bright circus on the face: 4. By its obstinate duration unless specifically treated.

Psoriasis palmaris simplex is distinguished: 1. By its non-specific history; 2. By its more diffuse characters and non-symmetrical appearance; 3. By the split nature of the surrounding epidermis, and general desquamation of the skin; 4. By being usually referred to some habitual mechanical or chemical irritation, as in the case of barmen and others.

Eczema palmare is distinguished: 1. By its superficial desquamation, often accompanied by moisture, a distinctive sign of eczema; 2. By its almost invariable occurrence with gouty or rheumatic diathesis; 3. By its being amenable to treatment for the above-named affections, chiefly alkaline, and its non-influence by specific treatment.

One case nearly identical with that quoted by Dr. Anderson more especially occurs to me. A clergyman consulted me last year. He had been suffering for some years with a squamous affection of the palms of the hands. I prescribed the different preparations of mercury and tar, but with little or no avail. Vaseline and acetate of lead were most beneficial, as I have found in all these gouty skin eruptions, combined with suitable constitutional treatment and dieting, without the use of stimulants, especially beer and alcoholic liquors, a poison to most skin-affections. He is now visiting the alkaline springs of Switzerland, from which, he informs me, he is getting much benefit.—James Startin, Surgeon to St. John's Hospital for Skin-Diseases; Savile Row.—*Brit. Med. Journal.*

To Postpone the Final Moment.—Under the above heading, in the St. Louis *Clinical Record*, mention is made of a case of phthisis in which the patient, a young woman, was in extremis—extremities cold, radial pulse gone, respiration gasping, and tracheal râles evident to everyone in the room. Three drops of amyl nitrite were given by inhalation. The pulse returned to the wrist, the face showed some colour, the respiration became more free and lost its stertorous character, ability to swallow and to speak returned. This lasted an hour, when depression returned. The amyl was used again and again with less and less effect, till, finally, it ceased to act.

Midwifery.

HÆMORRHAGE FROM THE GENITAL ORGANS DURING PREGNANCY AND PARTURITION.

* * * * * *

The President (Dr. Kidd) said that, before calling on Dr. Macan to close the debate, he would sum up some of the more important points that had been touched upon, with a few brief comments. Dr. Macan opened his paper with remarks on the hæmorrhages of the early months, and the so-called menstruation of pregnancy, which he had very conclusively shown was not menstruation at all, but hæmorrhage arising from various causes; and Dr. Henry Bennet had drawn attention to the frequency of inflammation of the cervix as one of these causes. This was quite in accordance with his (Dr. Kidd's) own experience; and, guided by what Dr. Bennet had said in his work on *Inflammation of the Uterus*, he had from an early period made it a rule, in treating cases of frequently recurring small hæmorrhages, or long continued draining of blood in early pregnancy, to examine the cervix, when he generally found the condition described by Dr. Bennet; and on curing this the hæmorrhage ceased, and the patient went to her full time. Dr. Macan said he had directed attention to the recent use of the thermometer as a means of ascertaining whether the embryo was still alive or had perished. If the thermometer could afford positive information on this point, it would render the obstetrician even greater service than it had conferred on the physician in the treatment of typhoid fever; but we must still rely on the old rules of practice, and endeavour, when the os was not open and no portion of the ovum protruded, to prevent abortion; and when it was open and a portion beginning to protrude, use all the means in our power to hasten its expulsion. Plugging the vagina was a most valuable method of controlling the hæmorrhage; but so long as there was any hope of preventing the abortion, no attempt should be made to adopt Dr. Bennet's suggestion of plugging the os. It was even doubtful whether the vagina should be plugged under such circumstances, unless the hæmorrhage were excessive. When the em-

bryo had come away and the membranes remained, plugging was a most valuable means of treatment in the early months. This was a most perplexing condition; so long as the membranes were retained, the patient was liable to excessive or even fatal hæmorrhage at any moment, and they might be retained for days; but if the vagina were sufficiently plugged, more especially if Dr. Bennet's form of plugging the os, "bottling up the uterus," as he called it, were adopted, the attendant might leave his patient for some hours, satisfied that no hæmorrhage of consequence could take place; and when he removed the plug at the end of ten or twelve hours, he would probably find the membranes in the vagina and all risk of hæmorrhage over. Another plan that had been often adopted, especially when the membranes had not come away with the first plug and the os was open, was to pass a catheter into the uterus, and with a syringe throw up a stream of cold water. This generally caused their expulsion in a few minutes, and he had never seen any unpleasant consequence arise from the injection. Placenta prævia was the next subject referred to. He would only allude to the very interesting points as to the pathology of this condition, discussed by Dr. Macan and Dr. Barnes, and would pass on to some of the plans of treatment spoken of by others. Dr. Wallace spoke of plugging the vagina as being in common use in Liverpool, and expressed fear of the practice, lest the hæmorrhage should go on in a concealed manner, blood accumulating in the uterus. Plugging had long been the practice adopted in Dublin, but it did not originate there. It was a German practice introduced in the last century; and when the membranes were unruptured, or the case was one of complete placenta prævia, it was a most remarkable method of controlling hæmorrhage till the os was sufficiently dilated to allow the completion of labour. If the placenta were attached all round the os internum, or the membranes were unbroken, the blood could not accumulate in the uterus. But the plugging was not so much in use in Dublin now as formerly. Twelve or fourteen years ago, there was a great debate in the London Obstetrical Society on the treatment of placenta prævia; and since the induction of labour as soon as possible after the discovery of the nature of the case, especially if the child were viable, had been more and more adopted as the rule of practice. He had himself been frequently called to see patients who had been safely conducted through one or two early and slight hæmorrhages, and then reduced to a state of so great prostration by a sudden rush of blood that they died in the act of delivery, or even before it was attempted, and therefore he lost no opportunity of urging the induction of labour as soon as it was clearly ascertained that the case was one of placenta prævia. For this purpose the plugging of the os after Dr. Bennet's plan, with prepared sponge, as suggested by Dr. Playfair, was the best means of commencing the induction of labour, as not only checking the bleeding, but at the same time dilating the os. Regarding the treatment of *post partum* hæmorrhage, Dr. Edis had drawn attention to the preventive treatment, and to the advantage of attending to the general health of the patient before labour came on. He had happily compared this to the training an athlete underwent before undertaking a race or other great physical exertion, and had very wisely urged that women should be put in training by attention to their general health for the exertion they were about to undergo. Dr. Malins, Dr. Dill, Dr. Edis, and others, had further spoken of the importance of preventing the woman's powers from being worn out and exhausted by prolonged efforts in labour, and advised that she should be assisted by the use of ergot or by the forceps. That the undue prolongation of labour was one of the most frequent causes of *post partum* hæmorrhage could not be questioned, and all must agree with Dr. Edis in recommending the prompt use of the forceps when delay threatening to exhaust the patient occurred in the second stage. There was another means of preventing hæmorrhage which had not been spoken of, that was of not less value: the placing of the hand on the fundus as soon as the child's head was expelled, and following the uterus down, keeping it contracted till not only the placenta was expelled, but for some time afterwards, to afford time for the closing of the vessels by Nature's own processes. This following

down of the uterus was called by Dr. Collins "a duty of paramount importance," and was very different from the method of Crèdè, which had been mentioned. He tried to expel the placenta at once by pressing on the uterus. Collins' or the Dublin method was to wait till the uterus expelled the placenta by its own efforts, securing a good contraction all the time; and with the same reason one did not extract the child, but allowed it to be expelled, even the feet, by the contractions of the uterus and vagina. The introduction of the hand into the uterus for the removal of clots, and causing contraction, as a means of checking hæmorrhage, had not been spoken of. It was certainly a most efficient mode of treatment, and should always precede the use of injections of any kind. Though an operation that seemed specially liable to be followed by inflammatory and septicæmic symptoms, it was certainly not so dangerous as the use of styptic, or perhaps even simple injections, and in the majority of cases completely checked the bleeding. Dr. Malins spoke of the effect of vomiting in checking the bleeding, and reminded the meeting of Higginbottom's recommendation to administer ipecacuanha in cases of *post partum* hæmorrhage. Of this treatment, the President had no experience; he had not tried it, because, in the first place, ipecacuanha took a considerable time to produce its effects, and he feared the nausea that preceded the vomiting would be injurious; but he was always glad to see vomiting in cases of hæmorrhage, and more than suspected that the greatest benefit derived from the use of ergot by the mouth was caused by the vomiting it often induced. He had very seldom seen hæmorrhage recur after vomiting had taken place. Dr. Walter's cases proved that the conditions were not yet known, under which injection of hot water might be relied on for inducing contraction and checking bleeding. That it was often useful, and stimulated very promptly the vital powers when the patient was cold and prostrate, the President was well aware from his own experience. The injection of a solution of perchloride of iron acted in a different way. The iron both coagulated the blood and corrugated the uterus, as Dr. Barnes had remarked. Unfortunately the coagulation sometimes extended along the vessels, even reaching the heart, and so killing the patient, In Coombe Lying-in Hospital, they had often tried the introduction of a small piece of the solid perchloride into the uterus, either leaving it there or removing it in a few seconds; and the practice was probably a safer one than the injection of a solution. Professor Dill and Dr. Cordes had spoken of the advantage of lowering the patient's head so as to favour the flow to the brain of any blood that might still be in the vessels; bandaging the abdomen, by compressing the vena cava and other large veins, contributed to the same effect. Not only should the pillow and bolster be removed, but the foot of the bed should be elevated so as to give a decided inclination to the blood to gravitate towards the head. Some years ago, Dr. Wyse, of Rostellan, in the county Cork, wrote a paper recommending that the arms and legs should be elevated almost to a right angle with the body for the same purpose; and more recently German writers suggested bandaging the limbs tightly with the same view, and dignified the process with name of "autotransfusion." The last resource was transfusion. Dr. More Madden spoke of this as a difficult operation; but after experience of it, the President could state that with due care, and following the method and directions of Dr. Robert McDonnell, it was not very difficult. He believed that it was almost entirely devoid of danger or bad after-consequences, and one that ought to be had recourse to at a much earlier stage than had hitherto been done.—*Obstetric Section, British Medical Association.*

VOMITING OF PREGNANCY.

In his recent work on "Physiological Theraputics," Dr. Poole suggests a new theory of the cause of vomiting in pregnancy, in accordance with his general view of the antagonism between nerve and muscle. It is, that the rapid development going on in the uterus monopolizes so much of the available nerve force of the organism, that the nerves of the stomach suffer a deprivation, and their *restraining* power over the gastric muscle (the stomach) being consequently enfeebled, the independent contractile power of the muscular walls of that viscus, no longer adequately controlled, produces more or less frequent irregular and excessive contractions ejecting its contents: the frequency or rarity of this result depending on the relative strength of the antagonistic forces acting respectively through the nerves and muscle.

Vomiting in general is held by Dr. Poole to depend on paralysis of some portion of the nervous circle connecting the brain with the stomach, and of course emetics are paralyzers: certainly few if any of them can fairly be regarded as stimulants. If this view of the cause of the vomiting of pregnancy be correct, remedies producing decidedly "sedative" effects ought to be avoided, and the treatment directed by hygienic and other measures, mental and physical, to attract an increased supply of nerve-force to the gastric nerves.—*Cor.*

Original Communications.

HYPERTROPHY OF THE PROSTATE.

BY A. H. WRIGHT, B.A., M.B., M.R.C.S., ENG.

Read before the Toronto Medical Society, September 25th.

Old age is honourable; so they say, but it is inflicted with many infirmities, and among the most common is the subject of this paper. Sir Henry Thompson found, by an examination of two hundred dead bodies of men over 55 years of age, that about one in three exhibited some enlargement of the prostate; about one in seven manifes ed symptoms during life, which were severe in about half the cases; and he concludes that one out of every twelve to fifteen men approaching sixty years of age has symptoms sufficiently urgent to impel him to seek advice from the surgeon.

Is this a serious affection? Yes; I think it is. Let us glance at some of the results. The prostate is in intimate relation with the vesico-prostatic plexus of veins, and its enlargement produces congestion of the mucous membrane and walls of the bladder. On the other hand the enlargement by diminishing the calibre of the prostatic urethra causes obstruction to the flow of urine, and thereby the bladder is called on to produce greater efforts in expelling its contents, and hypertrophy ensues as a consequence. A residuum is left after urination, and, in the course of time, the mucus from the congested membrane acting on it sets up decomposition of urea and liberates carbonate of ammonia. This produces more mucus which acts as a ferment, and cystitis follows. Sacculi may be developed between the meshes of the muscular fibres on the walls of the bladder, and the formation of stone is not uncommon. The evil effects extend to the ureters and pelves of the kidneys, which become dilated and congested, and finally the substance of the kidneys may become congested and symptoms of uræmia may ensue. The patient's troubles are aggravated by loss of sleep, and the general inconvenience caused by frequent and painful micturition, and the catheterism which is so generally necessary.

Two deaths from hypertrophy of the prostate came under my notice last year. One case was that of an old man who went into the General Hospital for retention of urine from enlargement of the prostate. On his admission the physician who had charge of the patient succeeded after some trouble in passing the catheter, affording great relief at the time; but bad symptoms, including those of uræmia, arose, and, in spite of all remedies, he gradually sank, and died in about four days. In the other case, which occurred in private practice under a well-known physician of this city, the history was nearly the same.

Without doubt, then, this is, in some cases, a very serious affection. But fortunately in the majority of those affected, the results are not so alarming. Let us suppose a case. An old man, at the age of 55 or older, comes to you complaining of frequent micturition, especially at night. He cannot force out his urine in the old-fashioned way, but is compelled to strain. The stream is slow in starting, and "dribbling" in nature. He has the various signs of irritability of the bladder. He feels generally "out of sorts" and in low spirits. You will probably suspect hypertrophy of the prostate, and place him on his back and examine with your finger in the rectum. It has sometimes appeared to me that some surgeons have a great objection to introducing the finger into the rectum. There is no occasion for such an objection; because, under ordinary circumstances, your finger won't do the rectum any harm. Of course, I take it for granted that no surgeon is afraid of his finger; for, if so, he had better give up the profession, and engage in something more suitable for his delicate digital extremities. The examination per rectum will generally give a fair idea of the shape of the gland, as well as the size, although you cannot judge with any certainty the extent of the obstruction to the flow of urine from what you feel in the rectum. You may find considerable enlargement while the flow is comparatively free, while on the other hand only slight enlargement may be detected; and yet the middle lobe, or, more correctly speaking, the posterior median portion alone may be increased in size so as to more or less completely block the entrance to the urethra, and thus impede or stop the flow. Having completed

your examination, you have confirmed your diagnosis, and after requesting your patient to urinate, you proceed to pass a catheter; and you will probably cause him great surprise after he has, as he supposed, completely emptied his bladder by drawing off from four to twelve ounces, or more, of urine. You cannot always be sure of the amount of residuum from one passage of the catheter, but you have now got all the information you can from one examination. Well! what is to be done? Will you send the old man home with a prescription, and strict injunctions to be very careful in his mode of living; to avoid violent exercise such as sculling, cricketing, and steeplechasing; to abstain from sitting too long on an iceberg in the hot weather; to refrain from brandy and water at night, and cocktails in the morning; in fact, to avoid all excesses? Probably he has received a large portion of this valuable advice from his grandmother, and other kind friends at various times from his youth till now; and you had better, for your own sake, as well as his, do something more.

The consideration of treatment is a very important one. The symptoms will vary in different cases, principally in their degrees of severity, and of course complete retention of urine very commonly occurs, and is very frequently the occasion of our first consultation with the patient Various medicines, such as iodine, mercury, hemlock, liq. potassæ, &c., have been tried; but I think it is now generally admitted that these remedies have no effect whatever in reducing the size of the gland when enlarged from simple hypertrophy. This admission is not universal, however, as some surgeons still claim good results from the administration of internal remedies. Dr. Washington L Atlee read a paper before the Philadelphia County Medical Society in January of last year, in which he spoke very favourably of the good effects of fl. ext. of ergot in twenty-drop doses every four hours, and stated that in some cases patients were so much benefitted by this treatment that they were able to give up the use of the catheter, which they had been compelled to use for some time previously. I must say that I have but little faith in its efficacy, but in some cases it may be worth a trial. Let us go back to our patient, whose ailments are all caused by an obstruction to the flow of urine, which is of such a nature that he is never able to empty his bladder. The evil effects are most serious in a man who has passed through his years of greatest vigour, and he, fully realizing the fact, is made exceeding wretched by these unpleasant evidences of senile decay. As a general rule his first request is for some medicine to relieve his distressing symptoms. If he receives the harsh, blunt answer, that no medicine can help him, but he will have to depend upon the use of an instrument for the rest of his days, he is very apt to receive the reply with the same kindly feelings that fill the breast of the criminal when receiving his sentence of death. Such patients are apt to be very sensitive, and you should exercise towards them the same kind consideration and delicate tact that you display in your treatment of the wayward child or the weak, suffering, hysterical woman. You should, if possible, gain their confidence, and explain, as well as you can, the nature of their affection, and the probability of rendering their lives comparatively comfortable by proper management. A gentleman of this city consulted Sir Henry Thompson last year for symptoms like those described in our patient. Sir Henry, on examining him, found enlarged prostate, with a residuum of about eight ounces, and, when telling him this, illustrated his condition by saying, "that if you took a barrel of water and put a tap in it six or eight inches from the bottom, the contents of the barrel would flow out through the tap down to its level, but not below; and added, that in the case of the bladder, the residuum below the tap would decompose and set up irritation." As a remedy, he directed him to use a catheter at least once a day, and twice or more if necessary. This gentleman was immediately convinced and charmed with Sir Henry's homely illustration. He at once cheerfully learned to pass his catheter, which he now uses daily, and as a result lives in comparative comfort. As our supposed case had symptoms, to a great extent, similar to the last, we will dismiss him with the same advice.

I may say, without discussing the reasons,

that nearly all are agreed that the catheter is the essential remedy for these cases. Dr. Van Buren, of New York, insists strongly upon this, and says that "the catheter is the natural specific for enlarged prostate just as the steel sound is for stricture of the urethra," and he also advises daily washing out of the bladder in all cases where the mucous membrane is continuously congested. But an important question arises—When should we commence? My answer is, at once. Van Buren says we should most assuredly do so whether there be any residuum or not. Thompson is not so positive, but would consider the amount of residual urine and frequency of micturition, but in most cases commences at once. Some think it is not necessary for a man with enlarged prostate to use a catheter, as long as his urine is clear, and he is suffering no great inconvenience. Sir Henry Thompson in reply says, that this means that a man is not to practise catheterism until after the occurrence of cystitis. But this is what we are most anxious to avoid; in fact we wish to avoid, as far as possible, all the bad effects, and our strongest hope lies in habitual catheterism. How often should the catheter be used? This must depend on circumstances. Sometimes it is only necessary to pass the instrument once a day before going to bed, the result being that the patient gets an undisturbed and refreshing sleep, and experiences no inconvenience the following day. In other cases it may be required twice or three times a day, and unfortunately in some cases it must be used very frequently. Each case must be decided on its own merits. As a general thing it is not a difficult matter to teach a man to pass a catheter, and there is commonly very little or no irritation produced by a soft flexible instrument. When there is a large amount of residual urine, say from half a pint upwards, it is better to use the catheter at certain regular intervals, and depend on it entirely, never attempting to void the urine without it. In the year 1875 I had a patient 74 years of age under my care for nearly a year, who had an enlarged prostate, although I was treating him for a different affection. He had commenced regular catheterism about four years before, since which time he had passed a common gum elastic catheter three times a day. He passed it with the utmost ease, and suffered almost no inconvenience from it, certainly less than most of men at his age, even though, to use a common expression among them, their "waterworks may be in very good order." So slight was the inconvenience to him that he was able to use the instrument through a lingering illness of several weeks, which ended in his death, and I was only called on to do this duty for him twice, on the last day of his life. Within a stone's throw of this man was a friend of his of about the same age who had the same affection; and although I often tried to teach him to perform catheterism on himself, yet such was the difficulty in passing the instrument, and so feeble was the old man that it was impossible for him to accomplish it. While the other man suffered little or none from this cause, this patient suffered more or less all the time, and at irregular intervals of from one to three months I was called upon to treat him for retention of urine, which was generally accompanied with alarming constitutional symptoms lasting from three days to a week. In this case I found the irritability of the bladder and urethra most relieved by small doses of opium (gr. $\frac{1}{2}$) and, the old-fashioned incompatible combination of liq. potassæ and hyoscyamus. The contrast between these two cases, under observation at the same time, impressed me very strongly with the great advantages to be derived by the patient from the use of the catheter. In the same connection I may mention another case of a very healthy man about 68 years of age, who called me in to treat him for his first attack of retention of urine, caused by enlarged prostate. He was relieved very easily, and in a short time felt quite well; and although something was said about his learning to pass a catheter, still it was not done. He was not a regular patient of mine, and I lost sight of him for about a year and a-half, when I found him suffering severely from cystitis, with serious general disturbance to the system. I could'nt help thinking, in his case, that his sufferings were caused by the carelessness or neglect of his medical advisers (myself included) in not teach-

ing him to practise regular catheterism upon himself, and I now confess my share of the responsibility for such unfortunate results, privately to my fathers and brethren of this Society, with a great deal of shame. Although you will probably all agree in what I said before about this being a serious affection, still it is gratifying to witness the amount of relief which can be given in many cases by comparatively simple means. Even under the most favourable circumstances, however, some surgeons take a very gloomy view of the subject. In a discussion which took place in the Royal Medical and Chirurgical Society of London, in June of this year, Mr. Teevan stated that "a man who was compelled to use a catheter was as surely condemned to die as if he had cancer; it was only a question of time." Sir Henry Thompson, in reply, took a more cheerful view, and "protested against causing men who use the catheter to believe that life was thereby shortened. He knew a gentleman, who died at the age of 90, after using a catheter 22 years; and another gentleman at Norwich told him that he had used a catheter thirty-five thousand times. In the researches which he some years ago made in conjunction with Dr. Messent, on the old men in Greenwich Hospital, they found the average age at death to be 73; while that of those who used the catheter was 72¾." In these cases the most favourable condition is that of atony with probable dilatation; but in a certain proportion of cases, fortunately a rather small proportion, there is contraction with hypertrophy and irritability. Patients under such circumstances, after passing the catheter, only experience relief for a short time, and are compelled to use the instrument at short intervals of one to two hours, day and night. Their discomfort and pain may pass into an almost intolerable agony, which even opiates cannot relieve, and the tendency is to increase their sufferings until death comes to their relief. Sir Henry Thompson proposes to relieve them by making an opening into the bladder above or behind the pubes and placing a tube in it through which they may pass all their urine. He has done this in five cases with the result (to use his own words) "of rendering the short remains of a closing life tolerable." For a description of the operation I must refer to his works.

I will close this paper with some remarks upon passing a catheter, including some of the hints I have heard Sir Henry Thompson give in his clinical lectures, delivered at University College Hospital. We should, of course, not forget the cautions given in all our text books about the danger in some cases of drawing off all the urine at one time when there is a very large amount in the bladder. This has been known to cause death and quite commonly produces cystitis.

I suppose, Mr. President, that every member of this Society who has a penis has passed a catheter on himself. If not, he should have done so. I have no idea that I will ever forget my first attempt when I was a student. I had purchased what I thought to be a very pretty silver catheter with, as I afterwards discovered, a most vile curve. I commenced the operation with considerable enthusiasm; but my ardour was damped in a very short time. The thing did'nt fit, and would'nt go, and in fact never did go. That, sir, was one of the most signal failures of my professional career. I may say that I have never since attempted to pass that instrument on myself or anbody else. I think, however, it taught me a useful lesson, and I will never again try to adapt the canal to the peculiar shape of my catheter, but will rather get the catheter to suit the shape of the urethra. No man will love you if he has any idea that you are giving him unnecessary pain in passing an instrument; and, apart from the pain, I think that every man has a considerable respect for that portion of his body, and likes to have it handled in a respectful and respectable manner. Well, in the first place, as to the best position for catheterism: I prefer to have the patient standing with his back to the wall if he is able to do so. I then sit on an ordinary chair in front of him. Teevan advises this mode of operating in all cases where possible. The advantages are that the surgeon has more power over his instrument, and therefore greater delicacy of touch. The passage is directly in front of him, and he can more

easily detect any deviations from the proper course, and he is less apt to make false passages, or cause any other injury to the sensitive urethra. In a patient, I have spoken of before, who often had retention, I had great difficulty in passing the instrument, and was sometimes able to accomplish it in this position after I had failed in any attempt while he was lying down. Erichsen, however, objects to the erect position, and says, "I certainly think that the recumbent is not only the easiest position in which to introduce the instrument, but the safest. In old and feeble subjects the sudden withdrawal of the urine, by removing compression from the abdominal veins, and allowing these vessels to refill, may induce syncope, which, occurring in the erect position might prove fatal." This danger, however, might be obviated by allowing the patient to lie down after the instrument has entered the bladder, or by drawing off only a portion of the urine at once.

In choosing an instrument, a soft rubber catheter causes the least pain, but I have found it of little use when there is obstruction. In a case of retention from enlarged prostate I commence with an ordinary English gum catheter about number eight, without the stylet, bent into an exaggerated curve extending to the point. Sometimes it is better to add a curve to the shaft in the opposite direction, which has a tendency to increase the curve at the distal end during its progress along the urethra, and thus make it pass over the obstruction into the bladder. It may be held for a moment in hot water, and then dipped immediately into cold water, which causes it to retain its curve for a longer time. The shaft of the catheter should be held closely back in the groin, and the penis gently drawn round the curve, which is required for the posterior part of the canal; and when it has passed well into the canal the shaft should be depressed. Another method is to introduce the catheter with the stylet, and when it has reached the middle lobe, slightly withdraw the stylet. This causes the point to move forwards and thus pass over the obstruction. If I have failed with the gum catheter without the stylet, I next prefer the silver prostatic catheter with the long curve extending, as in the other instance, to the point, about 10 or 12 in size. Some surgeons, and among them Mr. Erichsen, think the metallic catheter is preferable to the gum because it is safer and more easily managed; while on the other hand the gum catheter is very unmanageable when the stylet is withdrawn, and if the stylet is left in it is as rigid and hard as the silver instrument. I agree with Erichsen in preferring the metallic to the gum catheter armed with the stylet; still, I have a firm conviction that the best instrument to commence with is the gum catheter without the stylet according to Thompson's directions. If all attempts at catheterism fail the urine may be withdrawn by the aspirator, introducing the needle above the pubes; and this may be repeated twice daily until you are able to pass the catheter. This is better than puncture per rectum or forcible catheterism.

Fortunately, however, with patience and care the surgeon is generally able by the above methods to enter the bladder, and the man is at once removed from his condition of extreme agony to the realms of bliss; and you have the proud satisfaction of relieving suffering humanity and earning the overflowing gratitude of your patient.

A FATAL CASE OF PURPURA HÆMORRHAGICA.

BY J. E. GRAHAM, M.D., TORONTO.

R. W., æt. 27, first called to see me in the latter part of March, when these notes were made. He has never been strong. Had anchylosis of the elbow joint, the result of old inflammation, which was operated on by Dr. Bauer, twelve years ago. Five years ago he had some consolidation of the right lung; for which he went south, remained in Florida during the winter, and returned much improved. About a year ago he had several patches of alopœcia areata--the spots have since become covered over. He has been in moderately good health until about two months ago, when he noticed a numbness of the hands, and the appearance of small nodules on the fingers and on the backs of the hands. He also noticed some general swelling of the feet

and hands. The nodules are quite numerous, about the size of peas, and appear to arise from deposit in the deep fibrous structure. There are also smaller and more superficial ones on the forearm, which have been irritable, and have been scratched. They are numerous, and have somewhat the appearance of lichen.

I ordered for him alterative tonics, and as he was not able to take ol. morrhuæ, gave ext. malt.

April 4th. The nodules have become larger, and some new ones have appeared. One quite large one has appeared on the side of the nose. The nodules have the same colour as the surrounding skin. The same eruption still exists on the forearm and legs. Found, on examination of the chest, no signs of recent disease in the lungs.

May 3rd. On my return to the city, after a week's absence, was told by Dr. Temple to-day that Mr. W. was very seriously ill, that he had pleurisy, as well as some trouble in the apex of the left lung. I called to see him on that evening. His mother told me that he had been very ill, but had improved considerably during the last two or three days. About a week ago he had exposed himself while in the country, and was seized with pain in the left side, which was accompanied with a good deal of fever. He was brought into the city, and under treatment had improved somewhat. On examination of the chest I found a friction sound on the left side of chest, close to the pericardium. Found also mucous rales at the left apex behind. He has been greatly troubled with nose bleeding. Appetite good, pulse 80. The nodules on the fingers have disappeared, as also the eruption on the arms and legs. Temperature slightly raised. He had been taking tr. ferri mur. and quinine. Ordered spirits turpentine in addition.

May 7th. He is very much troubled with nose bleeding. Had to apply a sponge soaked in sol. of tr. ferri mur. to stop it. His appetite is still good. Pulse 80, temperature 100.

May 9th. His nose has ceased bleeding. Noticed to-day, for the first time, a brownish discolouration of the urine. It contains blood in considerable quantities. Stopped turpentine, and ordered gallic acid. He is also continuing the iron and quinine. Pulse 84, temperature 99·5.

May 12th. The hæmaturia still continues, and the blood is increasing in quantity. It was concluded to try again the styptic properties of turpentine. It was given in half-drachm doses. Pulse 96, temperature 101.

May 16th. Notwithstanding all the remedies used, the bleeding from the kidneys still goes on. The urine now passed is quite thick with coagulated blood. Noticed to-night for the first time that there was tenderness over the bladder. It was evidently much distended by coagulated blood. A consultation was held, and it was decided not to disturb the clot. Gallic acid with aromat. sulph. acid was ordered. He suffers a great deal of pain on passing water.

May 17th. Patient is easier this morning. He has passed a number of clots through the night. His countenance is blanched, and he feels very weak from the loss of blood.

May 18th. Patient is very week, not able to move in bed, and can scarcely speak above a whisper. The coagula are again forming in the bladder, giving rise to great pain on micturation. Yesterday he was troubled with sickness of the stomach for the first time. Up to that time his appetite and digestion had been good. Ordered fl. ext. witch hazel.

May 20th. The urine passed last evening and to-day does not contain as much blood. The patient is better and stronger. The stomach is less irritable.

May 21st. Last evening he became worse. The blood is again increased in quantity. His stomach is more irritable, and the bladder is very much distended with clots. He suffers a great deal of pain in passing water, so much so that opium has to be administered constantly by the rectum.

May 22nd. Through the night the distension of the bladder caused a good deal of pain. He passed a small quantity of water this morning. The passage of urine is evidently impeded by pressure of clots. We noticed to-day a large swelling in the groin, caused by a large subperitoneal effusion.

May 23rd. No water passed to-day. He

has been delirious through the night, and is at times semi-comatose. Died at 4 p.m.

Post mortem examination made eighteen hours after death. Body somewhat emaciated. Purpuric spots found over the chest and thighs, the spots being from size of a pins head to that of a pea. On opening the abdomen a quantity of fluid escaped. Small patches of extravasation found on the intestines in every part. These spots appear to be caused by small effusion of blood immediately beneath the peritoneum. Bladder distended with coagula. It extends about half way up to the umbilicus. On removing it, found it distended to its greatest extent. As soon as an opening was made in its walls the fluid and blood clots escaped with a gush. The organ filled up the whole cavity of the pelvis, so much so that it was almost impossible to get the hand around it. It was remarkable that although the bladder was distended to such an extent it did not rise higher above the pubes than two or three inches. In fact, before death, we were not aware that so great an amount of distension existed.

Kidneys. Substance pale. The left one was enlarged, and appeared to be partly filled with fluid. The pelvis, and the inner surface of ureters showed the presence of coagula beneath the epithetial surface. The hæmorrhage appeared to come from the pelvis, and not from the substance of the kidney.

Liver. Slightly enlarged, and pale. Spleen enlarged, and apparently congested.

Beneath the parietal portion of the peritoneum, especially at its lower part, there are extensive extravasations of blood. There were also extensive extravasations beneath the mucous membrane of the bladder. On the left side of the thorax there was a patch showing the presence of inflammatory deposit. This was in the situation of the friction sound during life. The patch was quite elongated, partly made up of inflammatory exudation, and partly of extravasated blood. At the apex of both lungs deposits were found of a hard cretaceous nature. At the left apex there had apparently been active trouble.

The heart was found healthy.

Brain not examined.

Points to be noticed in this case are as follows :—

(1) Appearance of nodules previous to the onset of the disease. At least three months before the final attack these nodules were noticed. They existed in the deeper cellular structure, and were most probably produced by a slight effusion of blood. The numbness of the fingers may have been produced by pressure of the nodules on veins.

(2) Presence of more or less fever during the attack. The fever was noticed to be rather remittent in character. It was no doubt partly produced by local inflammation, the result of the presence of extravasated blood.

(3) The absolute uselessness of all known remedies for the disease. There was no apparent benefit resulting from any medicine used. The hæmorrhage from the kidneys appeared somewhat arrested after the administration of the fl. ext. of hamamelis, and in the treatment of another similar case I would try the remedy earlier in the disease. The remedies used were turpentine, ergotin injected hypodermically, gallic acid, aromat sulph. acid, tr. ferri mur., and fl. ext. hamamelis.

(4) Our knowledge of the pathology of this disease is in quite as unsatisfactory a state as is the treatment. Does the diseased condition exist primarily in the blood or in the blood-vessels? The theory of some German authorities is, that the diseased condition exists in a contraction, and reduction in calibre of the blood vessels, and the passage out of the blood from the vessels on account of their being surcharged with blood, would seem to be, to a certain extent, substantiated in this case by the character of the pulse. The pulse not becoming weak from continuous loss of blood, as one might expect, but retained its fulness and tension almost to the last day. On the other hand, in this case the blood seemed to retain its power of coagulating. The coagula which formed in the bladder were very firm indeed, and the blood did not differ in colour from ordinary venous blood. Other theories have been given. Buhl ascribes it to debility of the heart's action, and defective nutrition of the blood-vessels; Moneret, to a deficient formation of fibrine; and another ascribes it to an over distended condition of the blood-vessels in consequence of deficient secretion of bile.

French suggests that there is an abnormal relation between the walls of the vessel and the blood which has become altered in composition, from which arise obstruction and rupture of capillaries.

(5) The formation of firm coagula in the bladder was a circumstance which lead to a good deal of difference of opinion as to treatment. Some of the physicians in consultation were in favour of leaving the coagula alone, and others were in favour of breaking up and removing them with a large-sized catheter. It was however decided not to interfere, and, on reviewing the case, I cannot but think that it was the better plan, as any interference would, no doubt, have increased the hæmorrhage. On this point I found a similar difference of opinion among the authorities. Erichsen, among others, is in favour of removing the coagulum; and Sir Henry Thomson and Van Buren say that under such circumstances the bladder should be in no way interfered with.

In this case the hæmorrhage seemed to arise from vessels in the subserous and submucous tissue. This is the usual seat of extravasation.

7 A peculiarity was the determination of blood to the kidneys and to the pelvic viscera. It will be remembered that the hæmaturia began after the administration of turpentine, whether the administration of this drug had anything to do with such determination or not is a difficult question to decide.

My object in reporting this case is not to throw any new light on this obscure disease—because this, for me, is impossible—but to elicit the opinion of others, who, in their long experienec, may have made some observations on this very puzzling diseased condition.

I must confess that I have seldom treated a case in which I felt so great a lack of knowledge, both as to the pathology and therapeutics.

Anorexia—Mixture for Apepsy.

℞ Tincture of nux vomica .... gtt. v.
Extract of gentian ..... grs. xv.
Syrup of bitter orange peel.. ℥iss.
Quinine wine ..... ℥ivss.
Make a solution.

One half to be taken half an hour before each of the two principal meals.—*Le Prog. Med.*

Translations.

On the Blood Circulation of the Corpus Striatum.

M. Hallopeau has made a number of examinations of the brain, in which he has been able to establish that the sylvian artery is not the only one that furnishes vessels to the corpus striatum, but that it also receives anterior cerebral and anterior choroidal branches.—*Gazette des Hôpitaux.*

Treatment of Grave Tubercular Lupus of the Face.—Hardy.

1. Cover the parts invaded by the tubercles with an ointment made as follows: Bromide of mercury 6 grammes, axungia 20 grammes.

2. Cod liver oil, two tablespoonsful night and morning.

3. Take morning and evening, before meals, a tablespoonful of the following solution: Distilled water 300 grammes, chloride of sodium 15 grammes, iodide of potassium 5 grammes. (Very considerable amelioration in two months.)—*Le Progrès Médical.*

Diagnosis between Acute Miliary Tuberculosis and Parenchymatous Nephritis.

Touching a note on a case of acute miliary tuberculosis, affecting most of the organs and particularly the vaginal mucous membrane, M. Quinquaud states,—The observation of M. Rigal is very interesting from many points of view. I will consider only one of them, the difficulty of the diagnosis. According to the symptoms and evolution of the disease, M. Rigal had very reasonably made the diagnosis of scarlatinous nephritis and uræmia. The autopsy demonstrated that death had been produced by acute miliary tuberculosis.

The chemical examination of the blood might have thrown some light on the case. In truth, in parenchymatous nephritis, the hæmaglobin is lowered 62 grm. per 1,000: in the interstitial form it remains at 72 grms., more often at 75 grms. Again, in parenchymatous nephritis the solid matters of the serum descend below 62 grms., whilst in interstitial nephritis they remain at 75 grms. or over.

Let us oppose these alterations to those of acute miliary tuberculosis. The hæmoglobin reaches 90 grms. or remains above; the solid matters of the serum are at 92, 94, 90 grms. It is then possible to establish, by the help of these data, a differential diagnosis.

Finally, if there had been a co-existence of acute miliary tuberculosis and parenchymatous nephritis, the chemical examination of the blood and the thermometer might help the diagnosis; in these cases we find the chemical alterations of parenchymatous nephritis with increase of temperature, which can be explained neither by the existence of the nephritis nor by the uræmic accidents.

To estimate the hæmoglobin I employ a method essentially chemical, of great exactitude: we make use of a solution of hydro-sulphite of soda, which measures the oxygen of the blood with an approximation of $0^{cc}.01$ per 100; now in saturating the liquid blood with oxygen we can establish its value in hæmoglobin, since 240 cu. centig. of oxygen correspond to 125 grms. of oxydizable matter; it is a simple sum in proportion. In this manner we appreciate the quantity of crystallizable substance with a maximum error of 5 centig. per 100 grms. of blood.—*L'Union Med.*

Autopsy of Purulent Pleurisy—Impossibility of Recovery—Gosselin.

Yesterday we had occasion to make an autopsy upon a patient who succumbed to a purulent pleurisy, for which we had before practised the operation for empyema. I wish to profit by this example, to draw from it a precious lesson. This autopsy has demonstrated, once more, that recovery may be obtained after the operation for empyema, only if the lung can still dilate itself. You have seen, in fact, that the lung was altogether flattened against the vertebral column, that it was not dilated and could no longer be dilated, in such a manner that there existed, between the lung and the costal wall, a vast cavity in full suppuration. In order that recovery may be obtained after the evacuation of the chest by the large opening of the purulent centre, the lung must still be in a condition to fill this pleural cavity by dilating itself and by coming to adhere to the thoracic wall, consequently causing the primitive cavity to disappear. It the lung do not form adhesions to the parietal leaflet of the pleura, the cavity will persist, there will remain a great purulent cavity of the pleura which will continue to suppurate without end. Recovery becomes absolutely impossible. It is true they say, that in children recovery may take place with preservation of the pleural cavity. I am scarcely disposed to accept this opinion. In any case, in adults this never happens so. Definite recovery takes place only if the lung recovers a certain elasticity and a sufficient permeability, if not, the operation for empyema will only cause the death from septicæmia to be retarded.

So I cannot repeat to you too often that it is not necessary to be in a hurry to perform thoracentesis in simply serous pleurisy; it is a seductive operation, but it gives magnificent results only in cases in which the subjects are not tuberculous and in which the effusion is not reproduced. If there is the least disposition to suppuration, it is necessary to be guarded in punctions of the pleura, far better wait until it has suppurated spontaneously, unless, be it understood, the effusion by its extent threatens the life of the patient by asphyxia or syncope.

Our patient had been thus tapped for a serous effusion, which was reproduced many times afterwards, and which after a third tapping became purulent. In fine, let us note that at the autopsy we found tubercles in the lungs, as well as in the meninges; at the level of the tuber cinereum and the optic thalamus there existed even a point of suppuration.—*Gaz. des Hôpitaux.*

Disease and Its Hæmatic Index.

M. Petit read a work of M. Quinquaud on disease and its hæmatic lesion.

According to this author, each morbid species in nosology carries in its train a corresponding peculiar alteration of the blood. Here are some examples:

(*a*) In simple dilatation of the stomach, the hæmoglobin remains above 90 grms. (normal figure 125 grms. per 1000) the absorbing power of the oxygen at 174 cu. centig. (normal figure 240 cu. centig.).

(*b*) On the contrary, in cancer of the stomach, the hæmoglobin descends to 52 grms., and the absorbing power to 100 cu. cent.

Nevertheless, in cancers in general, we find a great destruction of the hæmoglobin, which may descend during the stage of full development to 28 grms., whilst the solid materials of the serum are slightly separated from the normal.

(*c*) Hæmoglobin, in interstitial nephritis, reaches the figure of 72 grms., its absorbing power to 140 cu. cent., the solid materials remain at about 74 grms.

(*d*) It is otherwise in parenchymatous nephritis when the hæmoglobin is lowered to 65 grms., the absorbing power to 126 c. cg., the solid materials of the serum to 64 grms.

(*e*) In *scurvy* the hæmoglobin attains the figure of 57 grms., the absorbing power 110 cu. centig.

(*f*) In *purpura simplex*, the hæmoglobin descends towards 70 grms., the absorbing power to 134 cu. centig., whilst in *purpura hæmorrhagica*, a little severe, the crystallizable substance of the blood is at 56 grms. and the absorbing power at 108 cu. centig.

(*g*) In true chlorosis, the hæmoglobin is destroyed in large proportions, arrives at 50 grms., the absorbing power remains at 96 cu. centig., but the serum remains perfectly healthy. This is almost the only affection which is characterised by such a lesion.

(*h*) Thoracentesis produces some modifications on the blood crasis; the hæmoglobin is lowered only in the few days which follow the operation. and soon this substance attains its primitive rate, the absorbing power diminishes equally. It is absolutely the same with the solid substances of the serum.

If the disease tends to suppuration, the curve of these lesions becomes decreasing. This is a sign which is valuable in discovering the suppuration of the pleura.

(*i*) These chemical analyses of the blood permit again of showing that there exists a difference between true pneumonia and typhoid pneumonia. In the first the hæmoglobin does not arrive at 100 grms., whilst in the second it descends to 70 72 grms. In the first the solid substances of the serum remain at 88 grms., in the second they arrive at 72 grms.

(*j*) In the renal tubulhæmia of Prof. Parrot there is scarcely an absorbing power of 30 cu. centig.

(*k*) The blood of the pregnant woman is less rich in hæmoglobin than that of the fœtus: mother's blood 96 grms. of hæmoglobin, fœtus, 95 grms. The fœtus, above all, uses the solid materials of its serum.

It proceeds from these hæmatological studies that there is often great interest for the physician to make analyses of the blood. They serve to establish a diagnosis and prognosis on solid foundations.

Diphtheria.

We append the conclusion of one the most interesting papers on diphtheria that we have met with. It is an account of 108 autopsies of diphtheritic patients dying in the wards of Dr. Triboulet at the *Hôpital Sainte-Eugénie*, between the months of August, 1877, and December, 1878, and was presented by M. Ch. Talamon to the *Société Anatomique*, on the 28th Feb., 1879. If we had entertained any doubts as to the identity of croup and diphtheria the perusal of this paper would have entirely removed them beyond a peradventure. We greatly regret that want of space prevents us from presenting the entire communication (which is very long) to our readers—

"We shall sum up, in a few lines, in conclusion, the principal facts which appear to us to result from these statistics. Diphtheria, a systemic affection, determines in the organism two sets of alterations: lesion of the surface, and deep or visceral lesions. The former affect the mucous membranes in contact with the atmospheric air; these are the pseudo-membranous inflammations, which are characteristic of diphtheria, in the same way as the lesions of Peyer's patches are characteristic of typhoid fever, or the variolous eruption of smallpox. The deep or visceral lesions are analogous to these of all the infectious diseases. They are generalized throughout the economy, but predominate or are more especially manifest in certain organs. We have observed them almost constantly in the lungs, the intestine, the liver, the kidneys, and the lymphatic organs. The generalization would doubtless

have proved to be more complete if microscopic examination of all parts, the muscles, glands, nervous system, etc., had been made. It is, in fact, very probable that if alterations in these organs escape detection by the naked eye, this is because they are, so to speak, only in the nascent state, and because the disease kills too quickly to afford them time to go through their evolution and become as apparent as in the infectious diseases of long duration such as typhoid fever.

The pulmonary and intestinal lesions have been, in our observations, the most common and most manifest. The respiratory and digestive apparatuses are, in fact, the two whose functions present most activity in the child. In the lungs, pseudo-membranous or purulent bronchitis with lobular, or pseudo-lobar, splenization. In the intestine, soft, white or red tumefaction of Peyer's patches, and prominence of the isolated follicles, constitute the alterations whose occurrence may be regarded as the rule. The intestinal lesions are located in the ileum, and present their maximum in the lower half, towards the valvule of Bauhin, as in typhoid fever. They are accompanied by swelling and violent congestion of the mesenteric glands. It may be said that inflammation of Peyer's patches and psorentery with mesenteric adenitis, are as frequent in diphtheria as is broncho-pneumonia with bronchial adenitis. The pseudo-membranous and visceral localizations of diphtheria, although governed in a general way by the gravity of the diphtheritic infection, appear to obey, in a certain measure, the influence of the seasonal constitution. As the result of our autopsies we believe that we are justified in the conclusion that during the six winter months diphtheria expends its force more especially upon the respiratory passages, and during the six summer months upon the digestive tube: that, in other terms, the diphtheria of winter is rather laryngo-pulmonary, and the diphtheria of summer pharyngo-intestinal.—*Le Progrès Médical.*

COTTRELL & BABCOCK, No. 8 Spruce Street, New York. We have received a beautiful chromo, "The Village Belle," from the above firm. It was printed on their *Four-roller* Cylinder Press, and is elegantly done. Illustrated catalogues of their presses will be sent on application to the above address.

THE CANADIAN
Journal of Medical Science,
A Monthly Journal of British and Foreign Medical Science, Criticism, and News.

TO CORRESPONDENTS.—*We shall be glad to receive from our friends everywhere, current medical news of general interest. Secretaries of County or Territorial medical associations will oblige by sending reports of the proceedings of their Associations to the corresponding editor.*

TORONTO, NOVEMBER, 1879.

ATTENTION!—A man was recently convicted of a petty theft before a police court. He had once been a prominent physician, and dated his downward course from the time that he cheated the publisher of his medical journal out of the subscription price. After that, he said, he found that every piece of rascality came easy to him. The moral here need not be pointed out, and we shudder for the future of some.

WARNER'S SUGAR-COATED PILLS AND PHARMACEUTICAL PREPARATIONS.

The following excerpts are from the *Medical Press and Circular* and *British Medical Journal*, whose words of commendation we heartily endorse:—

It is of some importance that medicine should be administered in as small a compass, and in as palatable a form as possible. We therefore hail with pleasure any improvement that is made in this department of pharmacy. To some of these pills we have given a fair trial. They are elegantly prepared, the sugar coating being an especially grateful vehicle to fastidious patients, and we have found them to answer every purpose for which they are intended. We can moreover, recommend the phosphorus pills, provided they are taken only under medical supervision, * * * *

This firm has also prepared from the gizzard of the domestic fowl a new and excellent kind of pepsin, called *Ingluvin.* It is suitable for all those cases of gastric disorder for which pepsin is usually given, and owing to the well-

known idiosyncrasy of the stomach, will be found to succeed when other similar preparations have failed.—*Ed. Medical Press and Circular, London, April*, 1879.

We have also received from Messrs. Warner & Co. samples of their pharmaceutical preparations for the use of physicians and practitioners. These preparations have received high awards at the continental and other international exhibitions, and have attained a considerable reputation in America. Warner & Co.'s sugar-coated pills are extremely well made; have a smooth elastic coating; and, if cut through, the mass within is found to be soft and easily soluble. They include phosphorus pills, containing $\frac{1}{50}$ of a grain of phosphorus in each; have been especially praised by the judges on account of the completeness with which the phosphorus is diffused and subdivided, whilst it is preserved from oxidation. "Ingluvin" is a preparation of pepsin extracted from the ventriculus callosus of the fowl, and is said to possess considerable peptic power, and to be especially successful in the prevention of vomiting in pregnancy, as well as a powerful and reliable remedy for the cure of indigestion and dyspepsia generally. A very convenient pill is a sugar-coated pill containing two grains and a-half of extract of colocynth and a quarter of a grain of podophyllin corresponding to what are popularly known as "anti-bilious pills." Another set of their preparations, which they call "Parvules," consisting of alkaloids and active principles diffused in small sugar-coated granules, *constitute, in our opinion, a distinct progress of pharmacy.* There is no reason why a series of parvules or granules should not be prepared containing the legitimate dose of strychnia, belladonna, ergotine, morphia, and so on, which should be absolutely reliable in use, extremely portable, potent, uniform, and agreeable both to the eye and palate. A well-assorted selection of sugar parvules or granules impregnated with all the various alkaloids and active principles and their salts could then be carried in the coat-pocket or could lie on the study table, and enough medicine for an army could be contained in a moderate sized cabinet. We have no doubt that the time is approaching when a surgeon's dispensary need not, for all practical purposes, occupy more than a corner of his study, and when ordinary dispensing will become a scientific manufacturing art, supplying ready to hand about three or four score active principles diffused in sugar granules, by the combination of which all the exigencies of the most refined and intelligent practice will be sufficiently met. Messrs. Elliot & Co, Toronto, are the agents for these preparations.—*Ed. British Medical Journal, April* 12, 1879.

Book Notices.

Laceration of the Cervix Uteri. By A. Reeves Jackson, A.M., M.D. Read before the Chicago Medical Society, July 7th, 1879.

On the Connection of the Hepatic Functions with Uterine Hyperæmias, Fluxions, Congestions, and Inflammations; with Appendix. By L. F. Warner, M.D., Boston.

Real-Encyclopädie der Gesammten Heilkunde. Medicinish-Chirurgisches Handwörterbuch Für Praktische Arzte-Herausge geben. Von Dr. Albert Eulenburg: ord. Professor an der Universität Greifswald. Wein, 1880.

The Multum in Parvo Reference and Dose Book, by C. Henri Leonard, M.A., M.D., Detroit, contains, besides Doses of all Preparations, official and non official, Remarks on Pharmaceutical Preparations, Rules for Pronunciation, Incompatibles, Rules for Genitive Case Endings, in Prescription Writing; Poisons and their Antidotes, Tests for Poisons and also for Urinary Deposits; Obstetric Department, Visceral Measurements, Abbreviations, Tables of Weights, &c., &c., all in a small book of 100 pages. The book is good of its kind, but as we have before had occasion to remark, such books encourage habits of laziness and carelessness, and contain a great deal that should be carried in the head and not in the pocket.

The National Dispensatory; Containing the Natural History, Chemistry, Pharmacy, Action, and Uses of Medicines, including those recognized by the Pharmacopœias of the United States, Great Britain, and Ger-

many, with numerous references to the French Codex. By ALFRED STILLE, M.D., LL.D., and JOHN M. MAISCH, Phar. D., second edition, thoroughly revised, with numerous additions. Philadelphia: Henry C. Lea, 1879; Toronto: Hart & Rawlinson.

That within the short space of six months a second edition of this work is called for, is perhaps a stronger testimony than anything we can urge as to the excellence of the book. We had the pleasure of reviewing and commending it in our May number, and have only to add to what we then said, that about one hundred pages of new matter have been inserted, and all new investigations have been noticed. Some illustrations have been added and a few changed. The Therapeutical Index has been extended by the addition of 2,250 new references.

The Summer, and Its Diseases. By JAMES C. WILSON, M.D. Philadelphia: Lindsay & Blakiston, 1879. Toronto: Hart & Rawlinson.

This is the fourth volume of the American Health Primer Series, edited by Dr. W. W. Keen, of Philadelphia, and is a very readable little book, intended rather for the general public than for the profession. Its seven chapters treat of "The Summer," "Sunstroke and Heat Fever," "Summer Diarrhœa and Dysentery," "Cholera Infantum," "Summer and Autumnal Fevers," "Summer Colds and Hay Asthma," and "The Skin in Summer, and its Diseases." We like the style in which the book is written; the author evidently fully understanding what sort of medical literature should be placed in the hands of the laity. Under Rules for the Management of "Infants during the Hot Season" no mention is made of the whey diet. This is, we think, an important omission; although, of course, the author does not pretend to give more than brief general directions as to the management, during the absence of a physician, of the above-mentioned maladies.

Student's Pocket Medical Lexicon. By ELIAS LONGLEY. Philadelphia: Lindsay and Blakiston. 1879. Toronto: Hart and Rawlinson.

This little book merits no commendation. It is neither complete nor correct. The author, who, by the way, is not a medical man, advocates the phonetic system of spelling, and the book is gotten up upon the basis of the American Phonetic Alphabet, to suit the literary attainments of those who have not been "favoured with a liberal education." The first reference we made to the book for a definition of a term proved fruitless, and the pages teem with absurdities. "*Cephalic*" is pronounced with the *c* soft. "*Ceratonyxis*" is defined as "puncturing the cornea in operating for catarrh." "*Cervical*" is pronounced with the accent on the first syllable. "*Clitoris*" is a small gland anterior to the vulva. "*Epithelium*," the thin cuticle that covers the lips, nipples, etc., that are destitute of the ordinary skin. "*Hypodermic*," application of medicines externally after the skin has been removed by blistering. "*Impetigo*," a humid running tetter. "*Jaundice*," a bilious disease attended with yellow skin and eyes. In "*Umbilical*" the accent is placed on the antipenultimate. "*Diastole*," the periodic action of the heart and arteries. "*Zymosis*," fermentation; applied to diseases resulting from miasmatic influences: and so on *ad nauseam*. We selected the above at random in turning over the pages.

A Guide to Surgical Diagnosis. By CHRISTOPHER HEATH. Philadelphia: Lindsay & Blakiston. Toronto: Hart & Rawlinson.

In this little work, surgical affections are grouped anatomically, *i.e*, different parts of the body are taken separately, commencing with the head, and the symptoms of these affections or injuries peculiar to each region are described as clearly as the extreme brevity will allow. This arrangement is the same as that followed by the author, and other able clinical teachers, at the bedside, when the presence of the patient impresses the symptoms upon the mind of the student; and he is not apt to forget the lessons thus learned, if at the same time he faithfully studies one or more of the many valuable text-books now available.

While the general plan of the book is good, the matter is too meagre to be of much use to the young practising surgeon, or the advanced student; but we suppose it will be received

with delight by that too numerous class, who are always on the look-out for "tips," or "short cuts" into the good graces of their examiners. We would like to impress upon students, that there is no "royal road" to a knowledge of surgery, and consequently they should be content to acquire that knowledge and skill by industry and perseverance, spending as much of their time as possible in the hospitals, and using such text-books as Erichsen and Ashurst, or numerous others that we might mention. We think it should be the object of a distinguished surgeon, like Mr. Christopher Heath, to teach surgery, rather than help candidates to cram just enough information to enable them to squeeze through their examinations.

Physiology and Histology of the Cerebral Convolutions. Also *Poisons of the Intellect.* By CHAS. RICHET, A.M., M.D., Ph.D., Paris. Translated by Ed. P. Fowler, M.D. New York: Wm. Wood & Co. Toronto: Hart & Rawlinson.

This interesting and valuable little book, considerably abridged in its Anglo Saxon garb, is presented by its translator as a fit complement to his translation of Charcot's "Localization in Diseases of the Brain." Being a simple record of the facts pertaining to this subject, acquired to science in the past, and eschewing all doubtful and disputable matter, the work presents but a limited field for criticism, and all we have to say is commendatory. The translation has been well and faithfully done, and English readers are indebted to Dr. Fowler for a compendium of scraps of knowledge only to be found, so far as we are aware, scattered throughout the periodical literature and the transactions of the learned societies of England, France, Germany, Italy, and America. The work is divided into four sections: two Parts, and two Chapters. Part First treats of the Structure of the Convolutions; Part Second of their Physiology. Chapter First relates to their Physiological Properties; and Chapter Second to their Functions. The Appendant on "Poisons of the Intelligence" is also an abridgment of a monograph by the French author bearing this title, and is a short chapter presenting an analysis of the symptoms resulting from the action of alcohol, chloroform, haschisch, and coffee on the brain. It is an interesting addition to the book, but presents nothing strikingly new or original. The work, as a whole, will prove indispensable to English readers desirous of being *au courant* with the times. No exception can be taken to the get up of the book, whose style and appearance reflects nothing but credit upon its publishers, Messrs. Wm. Wood & Co., of New York.

Analysis of the Urine. By K. B. HOFMANN, Professor in the University of Gratz; and R. ULTZMANN, Docent in the University of Vienna. Translated by T. Barton Brune, A.M., M.D., of the Maryland University Hospital; and H. Holbrook Curtis, Ph. B. New York: D. Appleton & Co., Broadway Toronto: Hart & Rawlinson. 1879.

This valuable manual of urinary analysis is a work which has attained much deserved popularity amongst students of medicine and practitioners in the Vaterland; and we venture to bespeak for its translation an equally favourable reception in the New World. The subject matter of the book is preceded by a short introductory chapter giving an interesting but necessarily very brief account of the historical progress of urinary analysis from the days of Hippocrates until now. Chapter i., a short one, is devoted to a cursory glance at the histology of the urinary organs; and its still more brief successor deals with the excretion of the urine. After a rapid survey of the various theories upon the subject, the honest conclusion is arrived at, that "a perfectly satisfactory explanation of the secretion and excretion of the urine in all its details is wanting." Then follows an admirable chapter (iii.) on the urine, its physical, chemical, and microscopical properties and constituents in health and disease. This we cannot too highly commend to the careful perusal and leisurely digestion of the student; while we are persuaded that the busy practitioner, puzzling over some disappointing and unsatisfactory analysis, will herein find many a ray of light to clear up his perplexing difficulties. A brief chapter (iv.), describing reagents and apparatus, is here inserted; after which comes an excellent account (chapter v.) of the

quantitative determination of the principal constituents of the urine. Chapter vi., entitled "Key to the Approximate Analysis of the Urine," presents a ready help to the rapid analysis of a given specimen. Chapter vii. takes up general diagnosis: and here we have one omission to note, which is, the occasional occurrence of anuria as a symptom of hysteria. The specific diagnosis of diseases of the urinary apparatus is considered in the final chapter viii. The subject is here dealt with under three classifications:—

A. True Albuminuria, comprising 1. Hyperæmia of kidney, 2. Parenchymatous nephritis (in its various forms), 3. Interstitial nephritis, 4. Amyloid kidney.

B. Forms of Mixed Albuminuria, comprising 1. Pyelitis (four varieties), 2. Hæmatinria, 3. Cysto-pyelitis and pyelo-cystitis.

C. Forms of False Albuminuria, comprising 1. Cystitis, 2. New growths in bladder, 3. Bladder stone, and 4. Diseases of the urethra and prostate.

Throughout, the book is characterized by sound doctrine, scientific accuracy, and careful compilation; while, as a translation from a foreign tongue, its lucidity of style, terseness, and perspicuity are veritably surprising. It cannot fail, in our opinion, to attain the end set before its authors in its preparation, and prove a most valuable aid alike to student and practitioner in the urological diagnosis and study of disease. Eight very good double plates, portraying the microscopic deposits of the urine, complete the book.

Typographically, the text is all that could be desired, the print being beautifully clear and large; but we would venture to suggest to the publishers, Messrs. D. Appleton & Co., that a work intended for such frequent reference would be the better for being more strongly bound.

"Flint's Clinical Medicine," "Galabin on Diseases of Women," "Berkhardt on Asthma," and Vols. III. and V. of the "American Health, Primer Series," "Long Life and How to Reach it," and "Eyesight and How to Preserve it" will be noticed next month.

Meetings of Medical Societies.

TORONTO MEDICAL SOCIETY.

At a meeting held Oct. 9th, Dr. Oldright presented a patient, a boy, from whom he had removed a cyst situated on the frontal bone. The growth had produced some absorption of bone. Dr. Oldright also showed an encephaloid growth removed from the neck, being situated beneath the angle of the jaw. Dr. Alt reported a case of sympathetic neuro-retinitis. Patient with congenital cataract of both eyes. Some operation had been performed on the left eye, in England. On examination the cataract was found lodged in the anterior chamber of the left eye. There was cyclitis—no vision. Photophobia in right eye, but no sympathetic inflammation. The left eye was eneucleated. This was followed by pain, slight inflammation and sluggishness of pupil of right eye and neuro retinitis which yielded to treatment. Dr. Zimmerman presented stomach and heart taken from a middle-aged man, found drowned. The coats of the stomach were greatly thickened and the pylorus narrowed, probably due to whiskey drinking. The heart showed a calcareous mass in the muscular substance of the posterior wall of left ventricle.

Dr. McPhedran then read a paper on Cystitis, giving the varieties, causes, pathological changes and treatment.

At a meeting held Oct. 23rd, Dr. Alt presented a tumour removed from the orbit of a gentleman. The growth extended from the outer to the inner angle, and appeared to be solid. Two years before, it had been operated upon and some cheesy matter squeezed out. A second operation was subsequently performed in New York, but the growth returned. The eyeball was pushed downwards and outwards. The growth appeared to start from the lachrymal gland, which was also removed. Microscopically it presented the appearance of an adenoma. Dr. Oldright related a case in which he had removed a sebaceous tumour from the cheek, and while doing so a second tumour appeared in the cavity, which had a pedicle attached to it, and passing through a small opening in the Buccinator muscle. This growth, which was about the size of a marble, was returned and

left. Dr. Macdonald related the history of a patient who had been in the habit of passing a catheter at intervals to dilate a stricture, and a few days before had broken off about an inch and a half of a conical No. 10 French catheter. After dilating the stricture, Dr. Grasett saw the patient in consultation, and was fortunate enough to seize the fragment in its long axis, with a Thompson's lithotrite, and extracted it. Dr. Alt read a paper on Tumours of the Anterior third of the eyeball other than epithelial, and illustrated his paper by microscopical preparations and drawings. He classified these tumours under two heads, benign and malignant. In the first class he placed Lymphangiomata, Telangiomata, Serous Cysts, Granulomata, Dermoid, Fibromata, Papillomata, Melanomata. Under the second class he placed Leuco and Melano, Sarcomata.

PARTIAL LEUCODERMA (VITILIGO) OF THE INSANE (DOTT. EMICO MORSELLIS.)

1. There exists a form of leucoderma which, being developed in mad men, may be distinguished as the leucoderma of the insane.

2. This dermatosis is characterized by the disappearance of the cutaneous pigment over a more or less extensive area, the borders of which are sometimes deeply pigmented. Such unequal distribution of the colouring matter is, anatomically speaking, a true dystrophy of the *rete Malpighi*.

3. This confirms the existence of that affection of the skin which developed in consequence of strong moral emotions, or grave and sudden psychic disorders, or at the end of long and debilitating nervous affections was admitted into dermatology under the name of "emotional dermatosis."

4. The leucoderma of the insane has well defined characters, distinct from other cutaneous affections in form, seat and definite appearances.

5. It appears, preferentially, in certain madmen who present more or less marked symptoms of excitement of the psychic faculty.

6. Regarding its pathology, it will probably enter along with many other dermopathies of nervous origin into the category of vasomotor and trophic neuroses.—*Rivista Sperimentale di Freniatria e di Medicina Legale.*

Miscellaneous.

HOW TO GARGLE THE NASO-PHARYNX.—When the gargle is designed to reach the naso pharynx, Dr. Löwenburg recommends the following method:—The patient inclines the head horizontally backward, and performs movements which we may call "quasi-deglutition," not including the last portion of this physiological action, definite swallowing. The liquid is passed much higher behind the soft palate than the ordinary method of gargling will permit; some persons succeed so well in this manœuvre that they are able to reject by the nose the liquid which has been received by the mouth. Moreover, these rapid muscular contractions completely detach the abnormal secretions, which can then be easily expelled, and the greatest possible relief is thus given to the patient.

A PECULIAR MICROCOCCUS IN GONORRHŒAL DISCHARGE.—In the *Centralblat für Med. Wis.*, July 12th, Dr. Albert Neisser, of Breslau, announces the discovery of a peculiar form of micrococcus in gonorrhæal pus. It is circular, or oval in outline, not coloured by indulin or methylgreen, usually in colonies of ten, twenty or more, surrounded by a membrane, generally found on the upper surface of the pus cells, rarely on the epithelial cells. Dr. Neisser found these bodies in the gonorrhœal discharges of both sexes, in acute and chronic cases, and in various cases involving the eyes. He believes they are characteristic of the disease, though he does not express himself positively on their pathological significance.

CROSS'S SUSPENSORY BANDAGE.—Mr. J. B. Cross, a student at Guy's Hospital, has devised a very simple, and at the same time cheap and serviceable, Suspensory Bandage. It consists of a bandage round the waist, to the middle of the back of which is tied a strip of flannel four inches wide, which is brought round the perineum to the front and fastened to the band; in this is a slit for the penis. Just behind the penis the middle of a another strip of flannel is fastened across the first, and one is brought up on each side and rolled round the band en-

circling the waist. This gives a support to the scrotum which has no tendency to slip; it can be adjusted very accurately, never be loose or too tight, and at the same is comfortable to wear. Of course other materials than flannel can be used, and with advantage, for flannel is too irritating for most people's skin. When modified in this way it will no doubt prove very efficient.—*London Lancet.*

Identification of the Prince Imperial.—The circumstances of the Prince Imperial's death have revived a question which has been somewhat neglected by lawyers and physicians, viz., the importance of the teeth as a means of identification of deceased persons. The late Prince Imperial had been so much disfigured, that identification would have been extremely difficult but that the Prince had had four small cavities in the first molar teeth filled with gold by Dr. Rottenstein of Paris, and had met with a slight accident, in April, 1876, from a blow on the front teeth, which had made it necessary to file the teeth a little, in order to smooth the enamel. These constituted signs which are unalterable, even by ages; and, as careful dentists keep usually a record of such operations, they afford a means of identification which is unerring, and which, as in the present instance, was of great value, and might, under certain circumstances, be of the highest importance.

Carbolic Acid in Shingles.—Dr. Lamberti reports, in the *Revista Clinica di Bologna*, a case of herpes zoster, or "shingles," which he cured in a single day by means of carbolic acid. He painted carefully the vesicles with the liquid, using a camel-hair brush, and then covered the whole part with a thick layer of cotton-wool. It caused severe burning pain for two hours, after which ease was obtained, and the patient, having received a dose of chloral hydrate, fell asleep, and awoke the next day feeling quite well. Nothing more was done, but the cotton wool was left on for three days. On its removal then the vesicles were all dried up, the crust adhering to the cotton-wool, and the spots that remained were not in the least tender. A saline purgative and a drink containing bicarbonate of soda were the only medicines taken. No return has occurred after two years, and Dr. Lamberti thinks this method of treatment may frequently prove of great value.—*Bost. Jour. of Chemistry.*

The Cinchona Cure for Drunkenness.—Much attention has lately been given to the alleged power of Peruvian bark to destroy the appetite for strong drink, and many cures have been reported from the remedy. Nothing would give us greater satisfaction than to believe in and recommend the reputed remedy. But we lack faith in the specific virtue of this or any other medicinal cure. When the inebriate has come to a resolution to abandon his habits, he seeks a staff to lean on, and finds it in the diversion afforded by the bark. Apart from this mental support and the tonic influence of the bitter, there is no healing power in the cinchona more than in any other agent of its class, such as calumbo or snake-root. We should be sorry to disappoint any one who has turned away from a bad habit and believes himself radically cured. Thousands upon thousands of men have done the same thing under moral and religious influences, and in an unguarded moment have fallen back. At the same time there are many who have succeeded in throwing off the chains permanently and gaining perpetual control over their appetites. To do this however, after once becoming an habitual drunkard, requires something more than herbs. It requires a strong will and constant vigilance, enforced by all the aids derivable from moral and religious sources, and the influence of associates and friends. It is well to throw in every help which imagination can devise, but not to depend on such helps. They soon wear out. It will be so with the cinchona cure. It will have its day, and then will come failure and disappointment, and then the remedy will be forgotton. We could wish it otherwise, but history will repeat itself.—*Pacific Med. and Surg. Journal.*

Births, Marriages, and Deaths.

BIRTHS.

On September 10th, at Toronto, the wife of Dr. J. H. Burns, of a son.

On September 21st., the wife of Dr. J. J. Cassidy, of a daughter.

THE

Canadian Journal of Medical Science.

A MONTHLY JOURNAL OF BRITISH AND FOREIGN MEDICAL SCIENCE, CRITICISM, AND NEWS.

U. OGDEN, M.D., *EDITOR.*

R. ZIMMERMAN, M.D., L.R.C.P., London, *171 Church Street Toronto, Corresponding Editor*

SUBSCRIPTION, $3 PER ANNUM.

☞ **All Communications, Letters and Exchanges must be addressed to the Corresponding Editor.**

TORONTO, DECEMBER, 1879.

Selections: Medicine.

BRIGHT'S DISEASE.

The sixth International Congress of Medical Science was held in Amsterdam during the week from September 7th to September 13th.

Bright's Disease.—The following note was presented to Section 1—that of Medicine—at the discussion on Bright's disease, by Professor Semmola of Naples. It comprised a *résumé* of the communication made by Dr. Semmola to the International Medical Congress at Brussels, on different kinds of albuminuria, which was reported in the *Gaz Méd. de Paris*, 1875; also a *résumé* of further researches made by Professor Semmola, and communicated to the present International Congress of Amsterdam. He said:

1. My first researches were conducted as far back as 1850. I think that I was the first to show the classic influence of alimentation and diet on the quantity of urine which is secreted in Bright's disease. (See Jaccoud's work, *Manual of Internal Pathology*, Paris, 1873, vol. ii. p. 685.)

2. This influence of diet on the increase or decrease of albumen in the urine, according to the greater or less amount of nitrogenous elements in the food, was the starting-point of all my researches. It led me to conclude that it is absolutely necessary to direct our attention not only to the renal lesions, but also to general nutritive disturbances in which the albuminoid bodies are either not at all, or only imperfectly, assimilated and consumed.

3. This idea, which I have always endeavoured to develop concerning the etiology of Bright's disease, has, to my mind, been confirmed by another classical fact which has hitherto remained completely misunderstood. I mean the considerable and progressive decrease in the quantity of urea which is formed in the organism from the first stages of chronic Bright's disease. (See note at the end.)

4. I have always insisted on this classical and fundamental point, and have repeatedly made communications on the subject to the Académie de Médecine of Paris and to that of Naples. I especially insisted on this point in Paris (1867) and in Brussels (1875), and have convinced myself by the study of three hundred clinical cases that the decrease of the urea from the first stages of Bright's disease is owing to a defective oxidation of the albuminoid matter.

I find that in all books authors speak of the defective excretion of urea; but I have never yet been able to discover anything about the defective formation, which I am sure is a principal and fundamental fact; a characteristic phenomenon of Bright's disease.

It is caused by the total or partial absence of the cutaneous functions. In consequence of this suppression of the respiratory functions of the skin, two chemical disturbances arise, which are closely united from a biological point of view—viz., the alteration and inassimilability of the albuminoid substances, and defective combustion, *i.e.*, a decrease in the formation of urea. I leave it to experimental physiology to elucidate the part which the cutaneous functions play in the assimilation and combustion of albuminoid matter. I shall merely restrict myself to pointing out the intimate connection between the two which has been revealed by the pathological condition; and I foresee that it will lead to the solution of a problem which is of great import-

ance both for physiology and pathology. As I have said before, this is a capital and fundamental fact, that can be repeated experimentally by varnishing to a certain extent the skin of a dog. It proves that the real chronic Bright's disease is a general affection, a defect in nutrition, in which the changes that take place in the kidneys (beginning with hyperæmia and ending with cirrhosis and atrophy) do not constitute the primary cause of the principal symptoms of the disease. Physiology fails to explain by what mechanism a morbid process, which has been confined to the kidneys from its very beginning—that is to say, at an epoch when they still fulfil their duty as purifying apparatus—could have had any effect on the production of urea, and thus act on the whole system. I beg my honourable colleagues to direct their attention to this point of renal pathology. It is a most important point, that has hitherto remained unobserved, because it can only be studied in the first stages of the disease, which only in rare cases come under notice in hospitals and clinics.

In all other cases of albuminuria that are not instances of true Bright's albuminuria, this decrease in the production of urea which runs parallel with the increase of albumen is not found. Consequently, it is of the highest importance to distinguish carefully between these different kinds of albuminuria so as to avoid a mistake that is often made and is dangerous, both clinically and therapeutically. The cause, the mechanism, the evolution, in short the *cachet* of the general chemical process of nutrition, combined with the decrease in the production of urea, and last but not least, the pathological alterations which take place in both kidneys, form a harmonious *tout ensemble*, which is always the same and constitutes the true type of Bright's disease properly so called.

6. The decrease in the production of urea which takes place in other cases of albuminuria is not in any way connected with albuminous filtration. It may exist in some cases, but varies very much according to the particular disease that has produced the albuminuria, and at the same time created disturbances in the general process of nutrition (heart-disease, etc.). Here, however, the decrease in the production of urea is not connected with the phenomenon of albuminuria; its progress takes place in an entirely different way, and it is not till the last stage of those various affections, *i.e.*, when the kidneys have become thoroughly diseased (amyloid degeneration, etc.), that a very considerable decrease takes place in the secretion of urea in the urine for want of filtration. It results from the aforesaid, that this decrease is a mechanical effect which gives rise to the accumulation of urea in the blood with all its fatal consequences.

7. In Bright's disease, properly so called, there are two causes for the decrease of urea in the urine. In the first stage of the disease, the decrease is caused by incomplete combustion, a defective nutrition, combined with changes in the albuminoid, which is gradually developed, owing to the suppression of the cutaneous functions. Later on, that is to say, when the affection of the kidneys has reached a further stage, a second decrease of the urea takes place in the urine owing to defective secretion.

8. The tendency to exaggerate the anatomical point of view of the affection has led to neglect of the chemical and more universal aspect of it, thereby producing a conclusion which is perfectly paradoxical so far as regards scientific pathology, *i.e.*, "clinical unity" and "anatomical plurality" (large white kidney, amyloid degeneration, etc.). It is impossible to perceive in what way a general alteration, which shows itself with the same symptoms and consequently must spring from the same causes, can bring forth different anatomical results. The final difference in the lesion shows that there has been a difference in the nature of the preceding morbid processes. By combining all the conditions under which the symptoms constituting the clinical aspect can exist, the successive evolution of the process, and the constant relation between it and its special causes, we shall succeed in reconstructing the edifice of true Bright's disease, and in distinguishing it as a peculiar pathological species which differs from other species of albuminuaia.

9. The passages of albumen into the urine may take place through the three physiological factors that preside over the renal functions; viz., *a.* chemical constitution of the blood; *b.* degree of pressure; *c.* condition of the histological elements of the filtering apparatus.

10. Consequently, there are three classes of albuminuria, viz.: *a.* dyscrasic albuminuria (caused by excess of presence of the albuminoid constituents of the blood or by alterations occurring in them); *b.* mechanical albuminuria; *c.* albuminuria produced by irritation, *i.e.*, by some local histological cause existing in the kidney. This species is caused by the irritating effect of all the agents that penetrate into the kidney, either from without or that are formed in the organism.

These three classes of albuminuria are closely related to different anatomical conditions of the kidney. If each one of these three conditions have been only transitory, the anatomical structure of the kidney may remain in its normal condition an no albuminous filtration will take place (as in series *a.*). In other cases, it may be modified by a transitory morbid process, and then regain its previous normal condition. Finally, if the pathological condition that has given rise to albuminuria be presistent, the anatomical structure of the kidney undergoes a gradual change, and causes a particular defined lesion which differs according to the cause, and is in relation with each of the three factors which have modified the renal function so as to determine the filtration of the albumen. This will be more clearly shown in the diagram which follows:

Diagram of Classes of Albuminuria.

Variety of Albuminuria.	Causes.	Condition of Kidney.	Urea in the Blood and in the Urine.
a. Chemical conditions of the blood. Dyscrasic albuminuria.	Presence in the blood of an excess of albumen, owing to the diet.	Normal kidney.	The maximum of urea, sulphates, and phosphates contained in the urine varies according to the individual.
	An excess of the albuminoid constituents of the blood, owing to defective combustion.	Irritative hyperæmia, which is more or less intense according to the organ or apparatus whose functions are affected: the cutaneous surface, lung-disease, etc.	Progressive decrease of the urea in the urine, though it is not accumulated in the blood. Want of production.
	A change in the chemical constitution of the albuminoid bodies which circulate in the blood. This change renders them incapable of being assimilated, etc. (cachexia).	Fatty degeneration. Amyloid degeneration.	*Idem*, owing to the gravity of the case which causes cachexia.
b. Degree of pressure of the current of the blood. Mechanical albuminuria.	Various neuropathic affections having a direct or indirect effect upon the vaso motor system.	More or less transitory renal stasis.	Amount of urea almost normal, within the limits of physiological oscillations.
	Pregnancy: in short, every kind of pressure exercised on the inferior vena cava or the renal veins.	*Idem*, but occasionally the stasis becomes permanent, owing to the general conditions of the organism, or to organic causes that produce the lesion.	Amount of urea not depending on the pregnancy or the organic causes that produce pressure.
	Cardiac diseases that have not yet reached the stage of compensation.	Persistent stasis, cyanosed kidney, cardiac kidney.	Amount of urea decreases in proportion as the affection of the heart increases.
c. Histological alterations take place in the kidneys., Irritative albuminuria.	All the irritative processes in the kidneys, from their first stage up to complete nephritis.	All the anatomical consequences of inflammation beginning at the first stage, and the degeneration of the different kinds of epithelium up to renal sclerosis and atrophy.	Amount of urea is normal or slightly increased, owing to the fever (acute stage).
	The albuminous filtration is more or less considerable in proportion to the *rôle* and effect that the inflamed elements may have in the mechanism of the urinary filtration.	This depends on the special histological seat of the inflammation and its particular course.	Decrease in the production of urea, though there is no increase in the blood, owing to general disturbances in the combustion. Decrease in the production of urea, owing to defective filtration, and consequently accumulation in the blood.

If we look at the clinical history of Bright's disease properly so called, with a view to classifying it among one of the preceding groups, we find that it cannot be placed exclusively under either of these heads. It is a mixed albuminuria, *i.e.*, its complicated etiological mechanism contains all the other three mechanisms of the other classes of this affection. Analysed in this way, Bright's disease reveals a constant evolution and a harmonious relation between the nature of the cause, the etiological mechanism, the chemical and anatomical alterations, and the clinical form. The *modus operandi* is as follows: *a.* The gradual effect of moist cold on the skin. The gradual action of moist cold is the only cause of true Bright's disease. Other causes produce albuminuria and lesions that differ from the true type. *b.* The respiratory functions of the skin decrease gradually, till they cease completely. Their absence gives rise to the following disturbances, which appear at the same time, and are closely connected with each other: 1. Cutaneous ischæmia; 2. Accumulation in the blood of matter which ought to have been excreted by the skin; 3. Alteration of the albuminoid bodies, so that those which originate from the peptones are not assimilated; 4. Decrease in the combustion of the albuminoid bodies, and consequently in the production of urea.

If it were possible to arrest for a moment the harmonic solidarity of all the organs and apparatus, the kidneys might be excluded, as it were, for a certain time, during which first period they would be in no way connected with the true pathology of Bright's disease. But a similar abstraction can only be conceived in order to show that the anatomical lesions of the kidney are only a secondary process, and do not constitute the initial lesion of Bright's disease.

The four aforesaid causes produce the following effects upon the kidneys:

1. Renal hyperæmia. (Increase of pressure).

2. Irritating effect of the said hyperæmia, owing to the accumulation in the blood of substances that ought to have been excreted by the skin, and its dyscrasic condition in consequence. (Inflammatory effects.)

3. Elimination of the albumen through the kidneys (the depuratory organs *par excellence*), because, the constitution of the albumen being altered, owing to paralysis of the skin, it has become an useless substance, and may almost be regarded as a foreign body in the organism.

4. The progressive decrease of the urea in the urine is the result of the decrease in its production.

Thus we have a twofold series of effects, that are closely connected with and complement each other, *i.e.*: 1. The general nutritive lesions, with all their characteristic consequences; 2. The anatomical development of the inflammatory process of both kidneys, from the first stage to the last. These two series of disturbances constitute Bright's disease, or Bright's albuminuria.

The differences which exist in the clinical form of other albuminurias, and the combination of various final anatomical lesions existing in the same kidneys, depend entirely on special etiological causes (alcoholism, gout, syphilis, etc.), which modify the general condition of the individual, and consequently add to the renal lesions that are peculiar to the inflammatory chronic process other elements that vary according to either the nature of the alteration, or to their seat being more or less confined to one or the other of the different histological elements which constitute the kidneys. It follows that true Bright's disease has nothing to do either anatomically or clinically with any of the other species of albuminuria, whatever may be their origin. I also believe that it is not at all true, though affirmed by several authors, that Bright's disease may be caused by alcoholism, gout, etc. Whether considered from a scientific or a practical point of view, this appears false; because it is a well-known clinical fact that there is such a thing as albuminuria caused by gout, alcohol, etc. And each one of these affections corresponds to general nutritive alterations, which differ not only according to their etiology, but also are represented anatomically by considerable alterations in the kidneys, which in some cases are due to nephritis. These alterations, however, vary very much, so far as regards the affected spots; sometimes they are restricted to one kidney alone (embolic nephritis, pyelitis, stone, syphilis, etc.). If

both kidneys be affected, we always find that there exists a secondary disease, in which predominates an inflammatory condition either of the elements of the parenchyma or of the connective tissue, and which is either due to the irritating effect of a foreign body that passes through the kidneys (alcohol, resinous matter, cantharides, etc.), or to the presence of a deposit of urea that irritates and inflames the neighbouring tissues. In cases of degeneration (fatty, amyloid, etc.), the kidneys are as much affected as many other organs (liver, spleen, etc.); and it would be absurd to regard these cases as belonging to Bright's disease. I repeat it again and again, I am justified by my researches in concluding that true Bright's disease is a constant clinical type, a pathological specialty the characteristics of which *intra vitam* are albuminuria, absence of urea, cachexia, and a peculiar anasarca. The anatomical changes consist in an inflammatory process of both kidneys, which progresses very slowly, and extends gradually over the whole of the organ. These changes, however, are not quite the same for all the elements of the kidneys, but differ according to the physiological part that each element plays in the discharge of the renal function. All the exclusively histological localisations that have been held up as special forms of Bright's disease do not exist in nature in an isolated condition. They may only predominate in some elements that are more affected than others. That this renal affection is always a bilateral one I have already mentioned. I believe that this constant bilaterality constitutes, from an anatomical point of view, the peculiar characteristic or the final control of true Bright't disease, thereby adding a new proof to what I have said, viz., that there exists a profound universal deterioration of the system, which precedes the outbreak of the disease, and must necessarily act on both kidneys at the same time, though with characteristic slowness.

According to my opinion, this constant renal alteration ought alone to be called "Bright's kidney," for the following reasons, viz.: It is caused by the effect of moist cold; the dyscrasia following it is of a particular nature; and finally it develops gradually from a simply hyperæmic state till it becomes atrophic. It may occasionally reveal somewhat different symptoms; but this only takes place when another cause (alcoholism, gout, etc.) is superadded to the action of moist cold. Thus we have a series of complicated effects, both in the clinical form *intra vitam*, and in the nature of the alterations which are found in the kidneys and other organs after death.—*British Medical Journal.*

ON THE GENESIS AND PREVENTION OF TUBERCLE AND TUBERCLE-ENGENDERED DISEASE.

BY HENRY MAC CORMAC, M.D., BELFAST.

The laws of nature are certain and irreversible. It is undoubted that a ceaseless tissue-change ensues in man and animals; that old materials are given off and replaced by new; that nitrogenous waste is got rid of by the kidneys mainly, carbonaceous waste by the lungs mainly. A process of slow combustion takes place incessantly throughout the organism. The carbonaceous waste unites with the oxygen of the incoming breath, and is discharged ceaselessly, as carbonic acid, with the outgoing breath. So long as this process is performed efficiently and without interference, tubercular deposits are impossible. But when the same air, in whole or in part, is breathed again habitually, the effete carbon is not sufficiently oxidised, and of necessity accumulates in the organism. Tubercle, he submitted, is no other than the retained, because unoxidised, carbonaceous waste. Carbonaceous waste is never retained, tubercle never forms, unless when air already breathed proves more or less the unwholesome pabulum of respiratory life. These positions he assumed to have abundantly demonstrated in his treatises on consumption. If the members of the profession were but universally aware that air only once respired will not sustain combustion, they would not, he thought, gainsay his position that pre-respired air will not sustain life; and that consumption and scrofula, when fatal, are but forms of slow death, coupled with the corollary that, by making people breathe day and night air not rebreathed, consumption and scrofula, with all their hateful train, might be interdicted and set aside for ever.—*Brit. Med. Jour.*

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CONTRIBUTION TO THE STUDY OF ERYSIPELAS OF THE RESPIRATORY PASSAGES.

BY M. L. STRAUS,

Physician to the Hôpital Tenon.

The ancients, from Hippocrates down to Van Swieten and Borsieri, attributed a very great *rôle* to what they called *internal erysipelas*, and greatly dreaded erysipelatous metastases and repercussions, when, at the commencement of the present century, the works of Bichat and of Pinel directed attention to the numerous similitudes, anatomical as well as pathological, between the mucous membranes and the external tegument, so far at least as the mucous membranes holding the relation of direct continuity with the skin were concerned, this doctrine seemed to find in these works a fresh confirmation. Such was not the case, however. Compromised by its very excesses, the doctrine of internal erysipelas found but little favour with the anatomical school, and Behier was, as it were, the last echo of the opposition when he refused to see, even in erysipelas of the pharynx, any thing else "than an erysipelas complicated with angina, or an angina complicated with erysipelas." The question is, however, now set at rest; and thanks to the researches of Gubler, Lailler, Ed. Labbè, Cornil, Ciure, and Lasegue, it has been resolved, not absolutely according to the ancient conception of metastasis, but in the sense of the more rational theory of propagation by continuity of tissue, erysipelas of the nasal fossæ, of the mouth, of the pharynx, is now an accepted fact, no more to be disputed. The existence of *erysipelas of the respiratory passages* is also solidly established since the researches of Gubler and the remarkable theses of Lailler and Ed. Labbé. It must however be admited that these cases are infinitely rarer than those of guttural erysipelas, and perhaps rarer still are the published cases. M. Schlumberger in an excellent thesis, written under the inspiration of Cornil in 1872, was able to find in the whole literature of the subject only 6 or 7 cases, one of which was recently recorded in the service of my colleague, M. Dujardin Beaumetz. These cases nevertheless amply suffice to establish the indubitable existence of erysipelas of the larynx, trachea and bronchi. Quite otherwise is it with *erysipelatous pneumonia* or erysipelas of the lung. The ancients who admitted its existence without discussion and greatly feared it did not establish its reality by any anatomical proof. Since the question of erysipelas of the respiratory passages has been restated on a new foundation, no case anatomically demonstrated, nor any decisive clinical observation has been published. It has been my fortune to observe, and to follow from day to day, a case which I may be permitted by anticipation to designate by the name of *erysipelatous pneumonia* or more properly *erysipelas of the lung*. The conditions under which this pulmonary lesion occurred in a subject effected with erysipelas of the face, and of the buccopharyngeal cavity, its course and special evolution, its anatomical and histological characters, will, I think, justify this interpretation. (Here follow the clinical details of the case and the autopsy, which being too long to reproduce here we pass on to the conclusion of the paper.)

Let us sum up the principal features of this observation. A young man of vigorous constitution, not addicted to alcohol, and unaffected by any previous serious illness, enters the hospital on the 15th of March, for an erysipelas of the face which runs its course unmarked by any notable peculiarity. Six days later, the erysipelas being almost extinct upon the face and the patient nearly convalescent, there appeared dysphagia, with bright redness of the pharynx, uvula, tonsils and tongue (buccopharyngeal erysipelas); no hoarseness of the voice or laryngeal symptoms. On the 23rd of March there occurred violent recrudescence of the fever, acceleration of the pulse, and slight pain in the right side without a chill, slightly marked cough. A pneumonia spread with extreme rapidity, and in less than 4 days it had invaded the right lung throughout from base to apex, without presenting at any point a tendency to resolution. High fever, (the temperature being maintained above 40°c. morning as well as night) of an adynamic type existed, with meteorism, epistaxis, and subicteric tint of skin. The pneumonia appeared on the 23rd of

March, and on the 28th the patient was dead. *Histologic examination of the lung.* This examination furnishes in my opinion, new and decisive arguments in favour of the *special* nature of the pneumonia to which this patient succumbed. Even microscopically the appearance of the lung, on section, presented this peculiarity, namely, that in spite of the total and massive hepatisation, the pneumonic granulations were but slightly marked, even in the upper lobe in the portion affected with red hepatisation. The seropurulent liquid, which flowed in abundance from the surface of section, examined under the microscope, contained pus globules and red blood corpuscles, but no fibrinous mould of the terminal bronchioles and infundibula, as is observed in the liquid obtained by scraping the section of a lung affected by acute pneumonia after methodical hardening (alcohol, picric acid, gum), microscopical examination shewed the pulmonary alveoli completely filled by leucocytes *without any trace of fibrin.* On removing with a brush the leucocytes which filled the alveoli, the latter appeared with their proper contours, and it was impossible to detect the presence of swollen, multinuclear epithelial cells as is done in catarrhal pneumonia. Even the trabeculae of alveoli and the interlobular septa (lymphatics ?) are also deeply infiltrated by pus globules. The total absence of fibrine is observed not only in the portion of lung in full grey hepatisation but also in the portions affected with rose or red hepatisation.

It remains for us now to discuss this observation and its real value, and to establish that we had not to do with a simple pneumonia occurring in an erysipelatous patient, but with something special, in a word, with erysipelas of the lung. Now, this pneumonia presents clinical peculiarities, and above all anatomical peculiarities which distinguish and specialize it.

Clinically, there is in the first place the fact of the supervention of pneumonia in a subject affected with facial and guttural erysipelas, in the absence of any appreciable causative influence, imprudence or chilling; let us note, besides, the insidiousness of the inception, marked by a slight pain in the side, without chill, and lastly the extremely rapid and extensive march of the disease (the whole right lung being invaded in four days). The anatomical peculiarities are more decisive. The propagation by way of the trachea and right main bronchus is evident, and, it seems to me, sufficiently removes the objection of conicidence; no doubt the intermediate step, the erysipelas of the larynx and of the mucous membrane covering the upper rings of the trachea, is wanting. We must admit, either that the larynx has been over leaped by the erysipelatous phlegmasia, or that this latter has been so light and fugacious in this region as to leave no vestiges on the cadaver. The enormous extent of the solidification, its so rapid and entire passage to grey hepatisation in a young, vigorous and non-alcoholic subject are also worthy of attention.

Lastly, histologically, the total absence of fibrin in the pneumonic exudation is a point whose importance will escape no one. Doubtless when acute pneumonia has reached the stage of grey hepatisation the exudation is dislodged and liquefies, and the fibrin is dissolved in part but never in totality. Here, on the other hand, I repeat, this absence of fibrine was equally observed in the points of red hepatisation. One cannot refrain from comparing the enormous infiltration of the pulmonary alveoli by leucocytes, observed in this case, with that which occurs in the derma in cutaneous erysipelas. We know, in fact, since the labours of Vulpian, of Volkmann and Stendner, and of J. Renaut, cutaneous erysipelas is especially characterised by an abundant issue of leucocytes occurring into the meshes of the derma in the neighbourhood of the vessels and lymphatics. This vehement eruption of leucocytes is effected here into the pulmonary alveoli, doubtless by an anologus mechanism, and certainly under the influence of the same cause, the erysipelatous agent. In the two determinations of the erysipelas cutaneous and pulmonary, there were the same rapidity of effusion of white cells, the same want of plasticity. In short, the anatomical constitution of the pulmonary alveoli, as the labours of Ranvier have made them known to us, is singularly similar to that of the areolar connective tissue, it is not astonishing, therefore, that almost similar

anatomical structures should be the seat of pathological processes almost indentical. For these reasons we believe we may, without temerity, establish the fact of a special, if not specific, pneumonia, an erysipelatous pneumonia or what was more properly designated by the ancients "erysipelas of the lung." (Read before the Société médicale des Hôpitaux.)—*L'Union Médicale.*

CARDIAC HYPERTROPHY AND RENAL DISEASE.

Professor Buhl, of Munich, whose name is familiar to us from his researches on tuberculosis, has published a paper on the connection between renal disease (granular kidney) and cardiac hypertrophy, which, judging from the abstract of it in *Centralblatt f. d. Med. Wiss.*, 1878, page 668, is likely to set the pathological world a-thinking. The original paper is entitled, "Mittheilungen aus dem pathologischen Institut zu München, 1878."

Von Buhl rejects both the theories of Traube and of Gull and Sutton, as to the causation of the hypertrophy of the heart in Bright's disease, and, though it is not so stated, it is clear that, in part at least, Dr. G. Johnson's view, as well as Ewald's, lately referred to in this journal, would also be set aside.

The following points are urged against Traube's theory—(1) The occurrence of eccentric hypertrophy of the left, or of both ventricles without the presence of granular kidney; (2) the occurrence of well-marked granular atrophy of the kidneys without hypertrophy or dilatation of the left ventricle; (3) the occasional existence of left ventricular hypertrophy without dilatation; (4) the complete absence of signs of a dilated arterial system, which would be the necessary consequence of increased arterial tension; (5) the absence of cardiac hypertrophy in other forms of renal atrophy. Von Buhl further points out (6) that Traube's theory does not explain the hypertrophy of the right ventricle, which coexists with that of the left in 70·8 per cent of the cases; and that (7) the hypertrophy of the left ventricle is often present *before* the kidneys are atrophied.

Gull and Sutton's view, that the hypertrophy is due to a general fibrosis of the arterio-capillary system, is met by some of the objections raised above, and also by the facts that at the commencement of the renal affection the fibroid change in the arteries and capillaries is not present, and that it is rare for any other organ except the kidneys to be decidedly shrunken, whereas in a general fibrosis we should expect all highly vascular organs to suffer.

One general objection to all theories of increased arterial tension as a cause of the cardiac hypertrophy, and especially to Traube's theory, is the development of a *collateral circulation* in the kidney itself, by which the place of the constricted vessels is taken by others. According to Von Buhl, on the one hand the vessels of the fat capsule, and the fibrous coat of the kidney, and the capillary network of the cortex, dilate; and on the other, the blood is diverted into the vasa recta, which run in parallel bundles from the boundary line between the cortical and tubular substance into the latter. The lateral pressure in these vessels is much raised, and their diameter becomes doubled or trebled. The resistance of the vasa efferentia becomes of no importance, the blood enters the veins more freely, and the increase of pressure in the dilated vessels is relieved by increased excretion of water. The real connection between renal atrophy and cardiac hypertrophy, according to Von Buhl, is as follows, and it will be at once evident how much his hypothesis differs from the ordinary explanations of these phenomena. He asserts (1) that kidney and heart are simultaneously affected, but that the hypertrophy of the heart is due to myocarditis, the result of inflammation of the pericardium, the valves, and the heart-muscle itself, some form of which is present in 65.7 per cent. of the cases he has examined. The time when this inflammatory process occurs is the commencement of the renal affection. Now, the myocarditis may either leave the heart atrophied at once, or more commonly be followed by dilatation, owing to the diminished resisting power of the diseased muscle to the blood pressure, and afterwards by atrophy.

As a fact not previously noticed, Von Buhl describes *a relative contraction of the aorta* in these cases, which intensifies the hypertrophy of the left ventricle. Hence he explains the

increased arterial pressure and cardiac hypertrophy, not by granular atrophy of the kidneys nor by a general arterio-capillary fibrosis, but by the hypertrophy of the left ventricle and the relative constriction of the aorta.

The other changes in the arterial system are sequelæ of the heart disease. The arterial fibrosis of the kidneys is also secondary. Lastly, it is possible that excessive muscular exertion, and especially that of the cardiac muscles, may lead to myocarditis, eccentric hypertrophy of the heart, and other pathological changes met with in Bright's disease. Thus these conditions may be a not infrequent cause of this form of disease.

This short sketch of Von Buhl's new views necessarily excludes the data on which they rely for support, but his eminence as a pathologist must at any rate enforce their consideration, even though they deal roughly with current ideas.—*Med. Times and Gaz.*

TREATMENT OF CARDIAC DYSPNŒA.

Professor Sée says (*Concours Méd.*, July 12, 1879) that in all cases of continuous cardiac dyspnœa he has found iodide of potassium answer very well, especially where the dyspnœic symptoms were combined with a lesion of the tissue of the heart. It is equally useful in valvular lesions. Even if the diagnostic error of mistaking a simple cardiac dyspnœa for true asthma should be committed, the use of iodide of potassium would not be followed by any evil results, as it is an exceedingly useful drug in asthma. The direct effect of iodine in such cases is the promotion or rather liquefaction of the bronchial secretion. This greatly facilitates respiration. The dose given by M. Sée is 1.25 grammes per day; this is gradually increased to from 2 to 3 grammes, and is made as follows: R. Iodide of potassium, 10 grammes; Syr. cort. aurant, 200 grammes; 2 to 4 tablespoonfuls per day. Each spoonful must be dissolved in a tumbler of water. Patients suffering from heart disease take iodide of potassium very well—better than other patients. The following are the drawbacks of this drug: 1. Bleeding from the buccal mucous membrane, or bronchitis and hæmoptysis in tuberculous patients. (Phthisis is therefore a counter-indication for the use of iodide of potassium.) 2. Loss of flesh: in fat individuals this is to be regarded as a favourable symptom. 3. Loss of strength: in such cases the treatment must be suspended at once. 4. Loss of appetite. Opium may be added to iodine, in order to prevent the evil effects of iodine. R. Iodide of potass., 10 grammes; Syr. cort. aurant, 200 grammes; Extr. thebaic, 0·10 to 015 gramme. From 2 to 4 spoonfuls per day. For the extr. theb. the syr. papaveris may be substituted (50 grammes). Opium is given here with a view of making the iodine more easily tolerated, and of diminishing the cough, which greatly inconveniences the patient. Another very useful combination is that of digitalis with iodine, as the one has a soothing influence on the dyspnœa by acting on the lungs, and the other increases the action of the heart and modifies the arterial tension. The following formula will be found to answer well: R. Julep gommeux, 100 grammes; Iod. of potass., 2 grammes; Tinct. digit., g. 40; or the following formula: Extr. gent., 0·10 gramme; Pulv. fol. dig., 0·15 gramme. To take one pill three times daily, together with the sol. of iodine, which we have mentioned above. In cases where patients cannot take digitalis, chloral will be found to be a good substitute. Thus, *e.g.*, Julep gommeux, 120 grammes; iod. of potass., 2 grammes; chloral-hydrate, 4 grammes. To be taken every two hours during the day. —*London Med. Record.*

A New Hemostatic, prepared by Carlo Pavesi, has achieved quite a reputation, and consists of sulpho-carbolic acid twenty five parts, alcohol twenty-five parts, benzoic acid five parts, tannic acid five parts, glycerin twenty-five parts, and rose water two hundred parts. The sulpho-carbolic acid is prepared by mixing one part sulphuric acid and one half part carbolic acid, and heating for a few minutes on a water-bath. The benzoic acid is dissolved in the alcohol and glycerin, and the tannic acid in the water. The mixture is clear, straw-coloured, has an acid taste, is neither caustic nor irritating, and coagulates albumen, milk and blood. *American Jour. Pharm.*

Surgery.

CLINICAL LECTURE ON MALIGNANT STRICTURE OF THE HEPATIC FLEXURE OF THE COLON.

BY JAMES F. GOODHART, M.D.

Assistant Physician to Guy's Hospital and the Evelina Hospital for Children.

(*Concluded.*)

In the first two days he was sick, and had severe paroxysms of pain; still there was no visible peristalsis. The next two days he was quite comfortable, without sickness, the bowels acting with normal motions, and only one short paroxysm of pain. He was so comfortable, and complaining of feeling hungry, that I was somewhat thrown off my guard, and consented to his having a little fish. Whether from this increase of diet or not, I cannot say, but on the evening of the day on which fish was taken, he had sudden and severe abdominal pain, which produced speedy collapse; and, notwithstanding a liberal administration of opium, wisely given by Mr. Horrocks, when I saw him the next day he had the sunken eye, the cold skin, the thready pulse, of a patient with acute peritonitis on the point of death. After this, he vomited everything given him, which was very little; for I believe the best treatment in peritonitis is to give no food at all, and plenty of opium; and he died about sixty hours after the onset of his last attack of pain.

The *post mortem* made the same afternoon discovered a cancerous stricture of the hepatic flexure of the colon. This had led to ulceration above it in the ascending colon, and a large fæcal abscess had formed in the right hypochondriac and lumbar region. Suppuration had extended from it to the viscera in the neighbourhood, and so to the general peritoneum. We also found evidence of old peritonitis in the form of old adhesions; and these were associated with, and probably due to, old tabes mesenterica, of caseous and now calcareous disease of the mesenteric glands.

Now, remember my diagnosis was gastric ulcer, opening into the tissues outside the stomach, and so leading to the formation of inflammatory material, which had caught up the colon and impeded its action, but had not constricted its calibre to any great extent. Inflammatory products outside the stomach there were in plenty, but they originated not in the stomach, but in a stricture of much tightness in the colon.

How was it that we failed to diagnose this? Well, because the proper or usual symptoms were absent. The symptoms of stricture of the colon are paroxysmal colic, visible peristalsis, constipation, and distension of the abdomen; and, of these, some are much more significant than others. For instance, the paroxysmal pain is present in most intestinal inflammation and obstruction, whether in small or large intestine. The visible peristalsis may or may not be present; but, at any rate, in a tight stricture of the colon you would expect to find constipation and distension of the abdomen. If these be absent, I hardly know any condition which would enable you to make a diagnosis; and I do not see in this case, now that we have the *post mortem* to guide us, how we could have arrived at a perfectly correct opinion. If there be no distension, you will be justified in assuming that obstruction, if it exist, is very high up in the small intestine; or that it is a general contraction, such as I mentioned to you; or that it is not complete enough to hinder to any material extent the passage of the intestinal contents. I took the latter view in this case.

But the *post mortem* shows, I think, why the important symptoms were absent; and, in so doing, conveys a very important lesson with regard to treatment; indeed, the most important lesson that can be learnt in these cases. Remember that the stricture occurred at the hepatic flexure of the colon, and that above that, ulceration had occurred in the mucous membrane of the bowel, and a communication had thus formed between the intestinal canal and the loose cellular tissue outside in the loin. This had allowed of the escape of a quantity of the contents of the bowel into the large abscess we found, which was without doubt due to the ulceration of the intestine, and some relief to the distension of the bowel above the stricture.

Now, it is a well known fact of *post mortem* experience that strictures of the bowels are *never complete*. There is always a certain

amount of channel left, usually enough to squeeze the index or little finger through. So that it is probable that the fatal obstruction occurs from some temporary condition of the canal, which converts the partial into a complete obstruction. The treatment of these cases quite confirm this. Many are the cases, even of those which eventually have proved themselves due to carcinoma of the bowel, where the temporary condition has been tided over and the complete obstruction relieved. The conditions which cause this appear to be either paralysis of the muscular coat of the bowel; or some alteration in the direction or irregularity in action of the muscular force, by which means the contents fail to be propelled through the narrow canal in front of them; or some alteration in the contracted ring of bowel by which the existing canal becomes temporarily still more narrow. But whether one or all of these conditions hardly matters, because they all result more or less immediately from overdistension above the stricture. So that, in treating these cases, this is what you aim at, the unloading of the bowel above the stricture and keeping it as empty as possible. If you can do this, the symptoms disappear and the patient regains health, which of course will be lasting or not according as the stricture is carcinomatous or not, and according as the overdistension can be obviated in the future.

The most obvious way of accomplishing your object is, to those who have not seen the ill effects of their administration, to give purgatives, the *rationale* of such treatment being, no doubt, apparently to stimulate the muscular coat behind the obstruction and so to force the contents of the bowel through the stricture, but this is what does not happen; purgatives seem to create somewhat analogous conditions in those occurring when a large theatre or church full of people is set on fire and all the occupants attempt to rush out at once. You know what happens. Half are crushed at the doors and the other half burnt inside. Convert that into terms of intestinal obstruction, and the result of purgatives is generally either to produce ulceration of the bowel above the stricture or to make the obstruction more complete than before.

The proper procedure first at hand is to reduce the contents of the intestine above and below the stricture to the smallest possible amount. Above, you are helped in this way by the vomiting which is usually present; and all that it will generally be necessary to do will be to be passive, and put no more in to replace that vomited. Your duty is to starve —yes, literally to starve—the patient. He may suck a little ice, and have a mouthful occasionally of the weakest broth; and this rather to calm his mind than to sustain his strength. We need not mind about that. Most of these patients have a certain reserve in their blood and tissues to fall back upon; and in bed strictly at rest they are in no danger of dying from a day or two of foodlessness. You will clear the intestine below the stricture by copious enemata frequently repeated. Then, as to drugs, the first and by far the most important one is opium. This controls and moderates the intestinal muscular action, and in so doing, without any other means, will often put a stop to the obstruction. So quickly does it accomplish this sometimes, that the opium pill would almost appear to act as a purgative, only that positions are changed now; purgatives constipate, sedatives open the bowel. If the symptoms are severe, give no more than opium and wait; but in the less urgent forms of obstruction, both belladonna and nux vomica are of use.

With regard to belladonna, Dr. Norman Kerr has published some remarkably successful cases of the subsidence of the symptoms of intestinal obstruction under one and two grain doses of the extract, given at frequent intervals. I have lately had a case under my own care where I pursued a similar plan, the patient taking twelve grains of the extract in about thirty-six hours; but, unfortunately, the result was not successful; peritonitis supervened, and death took place as colotomy was being performed. I do not wish to imply that this treatment is valueless. I think now that the case was perhaps of too long standing to allow of any hope of success except by operation; and would suggest that the belladonna should be exhibited in the earlier days of the obstruction if it is to succeed. We certainly lost

valuable time, which might have allowed of successful colotomy, while pursuing the belladonna treatment.

I see no reason why ergot and digitalis should not be of use also; although they are less generally applied to. All such drugs, acting as tonics to the muscular coat of the bowel, induce a more persistent and forcible *vis à tergo*, replacing an irregular and inefficient muscular action. These, with warmth to the abdominal parietes, will be successful if any measures are of avail, and it will not often be necessary to do more by way of drugs. Some advise the administration of oil and other fluids to liquefy the intestinal contents; this is quite unnecessary, and even harmful, by adding to the quantity of liquid above the stricture, for it is a rule, to which I have seen no exception on the *post mortem* table, that *the intestine above the stricture is distended by fluid faces, not by lumpy matter.*

Well, then, should all these measures fail, and you have to do with stricture of the colon, and have only to consider the question of the relief of the stricture apart from its nature and other complications, then the proper thing to do, no doubt, is to open the bowel above the stricture by some surgical operation. Now, in deciding upon such a thing as this, it is perhaps more common to look upon the operation as a way out of a difficulty by avoiding it; as a means to secure a permanent opening above the stricture—an artificial anus in fact. But —and this is the point I wish to insist upon, for here it is that one of the points of our case come out—in many cases you will find that after the colotomy the bowels act and continue to do so by the ordinary channel. You relieve the overdistension by the operation, and the obstruction ceases. So that the operation is remedial in such. You do, in fact, by operation what you have previously attempted by drugs, and do not merely use a makeshift.

A very interesting case of this sort has been published in the *Guy's Hospital Reports* by Mr. Hilton. A medical man suffered for some time from abdominal pain and constipation, and eventually the obstruction became complete. Mr. Hilton saw him after twenty-eight days, and agreeing with the other medical men in attendance that the seat of disease was in the rectum or sigmoid flexure, opened the colon in the left loin. Four days afterwards, evacuations began to pass *per anum*, and from that time this continued to be the case; and the opening in the loin gradually healed. Eleven weeks after the first operation, all the old symptoms returned, and it became necessary to re-open the colon, when again fæces passed naturally *per anum;* and again—though this time vigorous efforts were made to dilate the artificial opening, the incision healed at the end of eleven weeks. The patient went on for some weeks, when it became necessary to open the colon a third time. By this time ulceration had occurred in the colon above the stricture, and a large abscess had formed outside the bowel, opening the hip-joint, and from which he ultimately died exhausted. He lived a year almost to a day from the time he was first taken ill, and eleven months after the first operation.

In our case, you will remember, there was no distension of the bowel, and nothing that could be called constipation, and I attribute their absence to a similar reason to that which existed in the case just narrated; viz.: to the presence of a safety valve above the stricture, the only difference being that in the one case it was made by the surgeon, in the other by the spontaneous morbid process of ulceration; and in our case, instead of being remedial it was a case of "out of the frying-pan into the fire." I can only suppose, however, that the ulceration which we found in the ascending colon had allowed the escape of fæcal matter into the cellular tissue of the right loin, and in this way had in some measure relieved the distension which must otherwise, almost of necessity, have ensued above the stricture, and so the bowel was allowed to act.

You may perhaps think that some less hazardous means of relieving the distension than that of colotomy might be adopted, and another operation has been practised with that end in view, viz., paracentesis. The distension is due partly to gas and partly to fluid fæces; and it has been thought that by withdrawing the former the severity of the case might be relieved. One of the distended coils

has therefore been tapped by a very fine trocar and cannula. But there can be no doubt that this is an exceedingly dangerous thing to do; and I do not, from what I have seen and others have told, feel in the least inclined to recommend it to your notice. The danger is this: that the distension is, in the majority of cases, but little relieved—that alone is an objection fatal to its adoption—and the bowel remaining full and its walls tightly stretched, fæcal matter, which you remember I told you is always liquid, leaks out into the peritoneum after the withdrawal of the cannula from even the smallest puncture. I have myself seen this operation performed, and fæcal matter came out at once by the cannula, no relief followed, and the patient died not long afterwards of acute peritonitis. So do anything rather than this. You are taught, and quite correctly so, that small wounds of the intestine are comparatively dangerless, because the mucous membrane becomes everted and so closes the aperture; but this only applies to a contracted intestine; we are dealing with an overfull one. All the coats are in such a case distended probably to their utmost, the rugæ obliterated, and there is nothing to evert; and the smallest hole, under such circumstances, becomes a vent, and a vent, however small, in such a position, is fatal. Of course, all these points are beside the question in our case, because there was no distension of the abdomen and no constipation, so that we had nothing to consider but the treatment by drugs.

One other fact in our case must be alluded to, if for no other reason, because you will not find much about it in your books. We found evidence of old peritonitis, and the glands in the mesentery were caseous or calcareous, and there had evidently been a so-called tabes mesenterica of former date, from which the patient had recovered. That condition is of sufficient interest in itself to devote a lecture to; but the point in this case is, that such a state of things must of necessity somewhat modify the distension which we should expect as the result of obstruction, and might in some cases prevent it entirely. It may, in conjunction with the other previously mentioned conditions, have so acted here. It is quite obvious that if the intestinal coils are matted together and to the surrounding parts, and the mesentery itself be shortened and thickened, there is less chance at any rate of the usual uniform distension, and it may be, as I say, that none will be present.—*British Medical Journal.*

EXPECTANT TREATMENT OF SYPHILIS.

Zeissl states that he writes this series of articles in response to a number of questions which have been addressed to him, verbally as well as through the press, asking why he has so materially altered his views concerning the therapeutics of syphilis of late years, and what his present ideas upon the subject are.

He speaks of having grown up in medicine with Hebra, Skoda, Rokitansky, Dietel, and witnessed their struggles against hypermedication in diseases, notably Dietel's successful treatment of pneumonia, typhus, etc., by pure expectation.

This determined Zeissl to try expectation in the treatment of syphilis when he had a good opportunity. Up to 1864, when he published his "Lehrbuch," this opportunity had not arrived, therefore in this book he adhered to the classical methods with which he had long been familiar, mainly in the hands of others.

In 1869, in the K. K. Allg. Krankenhaus, a second division and clinique for syphilis was established and given to Zeissl, thus furnishing him an in-and out-service with twelve hundred and fifty subjects, of which four hundred and fifty to five hundred were syphilitic.

Here was the long-wished-for opportunity, and Zeissl immediately commenced to improve it. He selected from his patients who had the initial lesion of syphilis a number having as nearly as possible similiar constitutions, put them on regular diet, treated the chancre with lime-water, carbolic acid solutions, and the like, and waited for secondary symptoms.

When general symptoms appeared the patients were divided into three classes. One lot got mercurial frictions, another preparations of iodine, the third purely indifferent preparations, to satisfy their minds that something was being done.

He now observed that in many cases ten to fourteen frictions promptly dissipated the symptoms, while in other cases the symptoms remained considerably longer, in spite of the frictions. He noticed that the internal use of the preparations of iodine was followed by a disappearance of the symptoms often within two weeks, but that many cases required four

to eight weeks, and others a longer time for involution.

In the cases treated by expectation he found that the secondary outbreak disappeared in from four weeks to several months, while in two cases a syphilitic exanthem disappeared entirely in fourteen days without any treatment.

In this way Zeissl learned that syphilis was atypical, seeming to depend for its course largely upon the physical individuality of the patient, the symptoms being short or long in duration, light or severe in type in different cases, irrespective of treatment. He noticed that gummatous forms of syphilis appeared as well in the cases treated by expectation as by other methods, but, he thinks, much less often of iodine. He noticed, also, that after a mercurial treatment relapses were more frequent and, as a rule, more obstinate than after treatment by expectation or by the preparations of iodine. He noticed that when treatment by iodine or expectation did not cause the early symptoms to disappear in four weeks, inunctions (ten to twelve) with mercurial ointment caused the symptoms to cease.

Zeissl states that if the first eruption be allowed to disappear without the aid of medicines and no other symptoms come on for one year, the patient may be considered to be well.

This expectative treatment requires patience, all the eruptions requiring considerable time to disappear, but Zeissl considers that by this treatment, with appropriate diet, cure is possible.

Zeissl here parenthetically remarks that he is not an anti-mercurialist; on the contrary, he thinks that the preparations of mercury are of great value, and in many cases of syphilis indispensable. He shelters his conclusions behind the clinical observation of forty thousand syphilitic patients encountered during an observation lasting over many years.

Of one hundred patients treated for the first eruption with mercury, Zeissl says that ninety-six will have relapses. He thinks that the early syphilitic headache disappears most promptly under three or four frictions of mercurial ointment, ʒss each. He believes that early syphilitic symptoms disappear most quickly, as a rule, under subcutaneous injections of calomel, but condemns the method on account of the painful inflammatory exudations which occur at the points of puncture.

Zeissl's ground is that mercury is not a bad agent, but that its early use is bad. He believes that syphilis should have a given time to blossom and ripen as it were, two or three months, and that then the mercury should be used in great moderation,—ten to twelve frictions or injections. He does not use mercury at all until the expectant methods and that by the preparations of iodine have failed to give satisfaction; and he believes that in this way he obtains the greatest good for his patients, the quickest as well as the most lasting cures.

When no treatment is used the eruptions cease to appear on an average in from two to eight months. Defluvium capillorum and glandular engorgment last often a year. Relapses, especially of a severe character, have been observed very seldom by Zeissl after an expectative treatment.

Although Zeissl believes the expectative method the best, still he rarely practises it; in hospitals, because the patients must get cured of their symptoms and go to work again; in private, because patients are unwilling to let their symptoms work themselves out but demand a quick relief.

Consequently the method followed in the clinique is iodoform or indifferent local applications to the chancre. When the first eruption appears,

℞.—Tinct. iodinii, 2.00;
Aquæ dest., 200.00.

If this causes cardialgia, he gives

℞.—Potass. iodid., 10.00,
vel natrii iodid., 10.00,
Pulv. et extr. gentianæ, āā q. s.,
ut fiant pil. No. 100.

8–12 morning and evening.

Iron is given (iodide of iron) to anæmic patients in solution in a dark syrup to prevent decomposition by the light, or in pill form.

If the syphilitic exanthem resists this treatment for six weeks, then he employs mercurials in injection, friction, or internally, being very careful that the patient keeps the skin and mouth in good order.

Much detail follows about the use of frictions and injections, and their results. The only preparation he uses by the stomach is the following:

℞.—Calomelanos, 0,15;
Extr. belladonnæ, 0,07;
Sacchar. alb., 3.00.
Div. in dosis æqu. No. 8.

One powder to be taken four times a day.

Mercurial fumigation and mercurial suppositories he has not used at all for many years.

Zeissl has employed tayuya in fifty cases, but has not made up his mind about it except that he has decided that it can do no harm in health or disease. The appetite improves under it.

Diday is quoted in support of the author's views.

In brief, it seems that Diday and Zeissl think alike, and Sigmund seems to join them, that chancre and the light early eruptions should be treated by expectation without specifics. Next, that harder cases require preparations of iodine, and finally, only severe ones and those not yielding after a fair trial of the other methods demand mercury.

In short, nearly all the world at the present day seems to be coming to a belief that mercury is very powerful and must be sparingly used, either for only a short time in reasonably large quantity in hard cases, or for a long time in minute doses, either continuously or intermittently as others believe—*Wiener Med. Wochens.*, 1879, Nos. 1, 2, 3, 4.—*Arch. of Dermatology.*

A Contribution to the Treatment of Psoriasis.—Preismann calls attention to the urgent necessity for removing the scales before applying a remedy to the diseased spots, and speaks of the difficulty of doing this thoroughly. For this purpose he was led to use, and now highly recommends, a solution of salicylic acid in alcohol, one part to sixteen. When this solution is rubbed lightly upon a patch with a cotton swab the scales instantly become loose and fall off, leaving the patch red, dry, and even. It also removes the grease and renders the action of the subsequently applied medicine much more efficacious. The lotion acts very efficiently in relieving the itching, and he has found it useful in chloasma, lentigo, etc.—*Wien. Med. Presse*, 1879, 16, s. 514.—*Archives of Dermatology.*

CLINICAL CONVERSATIONS ON DISEASES OF THE SKIN.

BY L. D. BULKLEY, M.D.

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Case II. Acute Papular Eczema.—Eczema is so constantly associated in the minds of the profession with vesicles that few of you would at first be prepared to call the eruption before you by this name. But if it be borne in mind that eczema is essentially a polymorphous eruption, capable of assuming the characters of very many other diseases, that it may appear and run its course as an erythema, or as a papule, or, as in the palms, that there may be simply thickening of the fissures, etc., you will be better prepared to make a correct diagnosis.

This man, Frank B., a bricklayer, aged 22, first noticed a papular eruption appearing on the arms and abdomen five weeks ago, which lesion has continued to develop and increase until the present time. You now see a considerable portion of the trunk and extremities covered with an eruption of small papules, intensely congestive, inasmuch as they disappear largely on pressure; you will notice that the flexor are affected much more severly than the extensor surfaces: the papules, which are quite thickly set, are in places gathered together in patches, and on some of them you may already observe a desquamation. There is great itching and burning over the whole surface.

He tells us that he has been taking sulphur internally and using a sulphur ointment to the eruption, which latter well accounts for the acutely inflamed condition of things. You know that sulphur is thought to be "good for skin diseases," and you would really be surprised to see how continually it is advised by patients, druggists, and even physicians, in the most varying eruptions. Now, while in chronic conditions of the skin it oftimes does serve as a good stimulant, in the acutely inflammatory condition or in a newly-developing eruption it is worse than useless, it is positively harmful; the only exception to this being in the case of scabies or "the itch," where it has a parasiticidal action, and even here it may occasionally create a very consider-

able artificial inflammation and hinder the progress of the case.

Let this case, then, be a warning to you against employing sulphur unnecessarily, for we may safely say that a large share of this irritated, distressing condition of the skin is due to the remedies he has employed.

We will order him a laxative composed of blue mass, compound colocynth extract, and ipecac, and give him tolerably full doses of acetate of potassa, to relieve the cutaneous congestion, and with a little weak zinc ointment (gr. xxx ad ℥i) we will find the eruption will fade rapidly. Later, I would give him locally the oil of cade mixed with cod-liver oil (℥i ad ℥i), which is an excellent application where a large surface is involved, but it would be much too stimulating at the present time.

Case III. Lupus Erythematosus. — This woman, aged 27, presents a lesion the true nature of which was long a doubtful question among dermatologists, and, indeed, there is yet very much to learn in respect to it. Bearing in mind the older descriptions of what was called lupus, remembering perchance some case where great destruction of tissue and disfiguration of the patient had resulted from lupus, one would hardly be prepared to give the same name, even when modified by *erythematous*, to such a picture as is presented by this patient.

Both cheeks and the nose are seen to be the seat of a reddened integument, presenting sharply-defined borders, and almost perfectly symmetrically developed. It requires no great stretch of imagination to liken the appearance to a butterfly, the body being represented by the nose, while the two patches on the cheeks answer to the wings,—a comparison frequently made by Hebra.

On close examination certain portions of this eruption are seen to present a very curious appearance, which is peculiar to this disease. This is a certain blocked-up condition of the sebaceous follicles, which are each seen to be filled with a horny plug; and where this has been removed artificially, as by treatment, you see the mouths of the follicles gaping, and evidently surrounded by infiltration. I have likened them in this state to a wax preparation into which numerous pin-holes had been made, so unyielding does the surface appear. When such cases are not treated locally a certain amount of crusting will form on the surface, and on removing this its under surface will be seen to be covered with minute prolongations, which represent sebaceous plugs which have have been drawn from the dilated follicles.

So striking is this sebaceous feature in certain cases, that Hebra originally described the disease as seborrhœa congestiva, and it is only comparatively recently that microscopic study of sections of skin taken from these cases has established it as a variety of lupus.

But although a variety of lupus you need not look for any of the destructive results which are associated with that name; this eruption generally leaves a superficial cicatrix, which is often very slight indeed, but sometimes quite disfiguring, though it never reaches beneath the tissues of the skin itself. You will notice that this surface is very even and uniform, it has none of the separated and isolated pulpy tubercles which characterizes the ordinary lupus, lupus vulgaris, which you know is sometimes seen in a very superficial form; nor has this any of the flat epithelial scales, attached quite firmly on ones ide, which you see in lupus vulgaris.

To those not specially acquainted with skin diseases syphilis always occurs to the mind at once as a cause; suffice it to say syphilis never presents any lesion which could resemble the case before you, even in the slightest degree. There are few, if any, sensations in this eruption; she says it does not itch, but burns a little occasionally; this alone would exclude eczema, which in this locality especially is distressingly itchy. Besides, this has never been moist at all, nor scaly, nor fissured; and on pinching up the surface you get very little thickening, a prominent characteristic of eczema on the face. I cannot think of any other eruptions with which you should confound it.

Unfortunately, the treatment in this, as in most cases of this disease, has not yielded any very good results as yet. The eruption is essentially a chronic one, and often resists treatment amazingly; in this case the eruption has certainly spread under various measures which have been employed, although now it seems to be at a standstill.

Internal remedies have little, if any, effect in checking the disease, although sometimes improvement will seem to follow them. This woman is now taking the eau de bourboule, the French natural arsenical mineral water, and there has been some improvement since it was employed, but I would by no means yet recommend its use until further investigations have been made.

Locally she has used the compound tincture of green soap followed by zinc ointment, and at first I thought there was some improvement under it, but afterwards the eruption spread greatly under its use. She now finds that the sulphuret of potassium and zinc lotion (R.—Potass. sulphuret., zinc sulphate., āā ʒi; aquæ rosæ, ʒiv), which I prescribe so frequently in acne, cools the face greatly, and under it the eruption certainly appears much less pronounced; but lupus erythematosus is a disease about which a hasty judgment can never be formed.—*Archives of Dermatology.*

Contribution to the Study of the Local Treatment of Psoriasis.—Besnier states that the treatment of psoriasis by arsenic does not prevent relapses. Until within a few years the best local treatment was the use of oil of cade; but chrysophanic acid has proven itself a better remedy, the principal objection to which is the staining that it produces. Pyrogallic acid, in his experience, is not inferior to any other local remedy, and appears to have certain peculiar advantages. It has no bad effects, and its action, though slow is effective, and it produces but little irritation. The brown colour which it leaves disappears in a few days, and it has no unpleasant odour. He uses it in the form of a salve, in the strength of five to twenty-five per cent., rubbing it on, after removing the epidermis by soap, every two or three days. This treatment was always followed by relief, which was usually permanent. — *La France Méd.* March 12, 1879, p. 161.—*Archives of Dermatology.*

Dr. Seth W. Williams, senior assistant in Bellevue Hospital, recently died of the very rare disease, idiopathic cerebral abscess.

Original Communications.

SMALL-POX IN ONTARIO.

FROM OCTOBER 1878 TO DATE.

BY A. A. RIDDEL, M.D.

Read before the Toronto Medical Society, Nov. 20th, 1879.

It will be remembered by those who may have perused the first part of the paper on the above subject, read before this Society on the 26th June last, that it was therein stated that I had written to medical men, and, where I could not ascertain whether any member of the profession resided, to lay friends, in those places where I had heard or seen it stated that small-pox had existed, for information. At that time some of those written to had already furnished the necessary particulars, and since that date others have responded; but still there are some who have not answered my appeal. To those gentlemen who have supplied what particulars they could, it is almost unnecessary to say that I feel truly grateful; while to those who have not, I have only to remark that their not having done so is to be regretted.

Before, however, referring to the cases in other localities, those that have presented in this city since June will be noted. As but few of them presented any new features, they will be mostly passed over in a cursorily manner. Those presenting anything of a special character will be reserved for a future occasion, when I trust to have the honour of bringing to the notice of the society the histories of some of the singular cases that have come under observation. The numbering of the cases is continued from those already given.

43. On the 6th July I was called to attend a boy, three or four years of age, who had arrived from Ottawa a few hours previously, with uncomplicated confluent. Not vaccinated.

44. On 29th of same month, I saw a young man on Queen-street west, in second day of confluent. He was removed to the hospital early next morning. His was a unique case. The day before he was seen by me Dr. W. W. Ogden had visited him, and found him with fever and some of the other symptoms of small-pox, but there was this singular feature present —the wrists, elbows, knees, and ankles, were of a deep red erysipelatous blush. The face was slightly red; but it was not till the morning of the day I first saw him that any papillæ presented. In the evening of that day his face was thickly studded with them, and they were scattered over the greater portion of his body. He had been vaccinated some six years before, and had a large, fair-looking cicatrix on the right arm. Nevertheless he had a severe form of confluent, with

malignant symptoms prominent. The cuticle around the joints first attacked became, as it were, gangrenous; and the fingers and toes partook of this character to such an extent, that it was feared he would lose them. The entire skin of the hands and feet formed those ill-looking, dark sanious bullæ, often seen in this disease, and unhealthy ulcers presented about the joints first attacked. He is of a frail, scrofulous constitution.

45. 30th July. A girl, 7½ years, was admitted from Edward Street. She was in fifth day of confluent, which took the usual course, except that the pustules dried very slowly, having first assumed the flattened form and ash-like colour so indicative of danger. There were the usual restlessness, insomnolence, jactitation and delirium, seen in severe confluent cases. She recovered. Vaccinated five years previously, but the cicatrices were scarcely visible.

46. 11th August. A little girl, aged three years, was admitted from Teraulay Street, in fourth day of confluent. She appeared to be doing well till the night of the 14th, when the pulse became small, weak, and flickering, and could not be counted because of its feebleness. She died next afternoon. Not vaccinated.

47. Same day. A sister of above, convalescing from varioloid. Vaccinated.

48. 12th. A brother of No. 45, aged four years, in first day of confluent. Vaccinated four days before admission. He had non-complicated confluent.

49. 13th. A young man, brother of Nos. 46 and 47, from Teraulay Street, with a mild form of varioloid. Vaccinated.

50. 16th. A man from Elizabeth Street, in second day of diffuse varioloid. Vaccinated when young, and had three large superficial cicatrices on right arm.

51. 18th. A boy, aged 12, from Don Mount, township of York, in fourth day of confluent. This was one of the worst cases that I have known to recover. Non-vaccinated. The condition of this boy was such that the fetor from his almost putrid body soon rendered the air of the room in which he was placed exceedingly offensive, notwithstanding the doors and windows were always open. Consequently, in the attempt to save his life, he was removed from one apartment to another whenever the air in that in which he lay was found to be tainted, —the few patients in hospital fortunately permitting his removal to four different and thoroughly clean rooms, as occasion required.

52. 24th. A young man, brother of Nos. 46, 47 and 49, in second day of varioloid. The following day petechiæ of a mahogany colour showed themselves on the lower part of the abdomen and thighs, denoting somewhat of a malignant type. These gradually subsided. Vaccinated. Had two cicatrices on left arm, the upper being of good appe
lower only superficial.

53. Same day. A young man, brother of No. 45, in second day of varioloid. Vaccinated when young.

54. 27th. A woman, wife of No. 50, in second day of what proved to be severe confluent. Two days after admission she was attacked by metrorrhagia, the discharged fluid being dark, offensive, and non-coagulable. The discharge was much more profuse than usual, dark and offensive. The fifth day after admission there was a slight discharge of blood from the lower bowel. Diarrhœa subsequently set in on two occasions, but was easily subdued. She also had an attack of bronchitis, which proved somewhat troublesome. She was vaccinated when young, but no cicatrix could be found, owing probably to the eruption.

55. 30th. A male infant, 2½ years, son of last mentioned patient, in first day of eruption. Pulse 150, and very small, with fever, laboured respiration, and diarrhœa of a most offensive character. Next day papillæ covered the entire body. It was non-successfully vaccinated ten days before admission, and again vaccinated two days before taken to the hospital. On 1st Sept. there were large vesicles on the latter vaccinated spots. Passive pulmonary congestion was doubtless slowly progressing from the first. The symptoms gradually became aggravated. There were difficult, catching respiration, jactitation, insomnolence, and he died on the 3rd September. In this case the eruption can scarcely be said to have reached the vesicular form.

56. Sept. 2nd. A young man from Ontario Street, in third day of diffuse varioloid. He was in the employ of the undertaker who inters those dying at the small-pox hospital, and buried a child from that institution on the 16th August, the eruption appearing fourteen days subsequent to the exposure. Vaccinated.

57—62. 20th Sept. I was called to see three patients—the father, a son of about 4 or 5 years, and a daughter aged 7, in Dorset Street. The father had the usual initiatory symptoms of small-pox, and a mild form of varioloid developed. The boy was recovering from semi-confluent. Not vaccinated. The girl had high fever; pulse, 150; violent jactitation, suffused eyes, wandering delirium, red face, hands and fore-arms, but no papillary eruption. Chronic convulsions set in later in the day, when a warm bath was given. The mother, necessarily feeling very anxious about her child, sent for me again in the evening. To her urgent inquiries as to the probable fate of her daughter, all that could be replied was:

"Your child cannot survive unless the eruption soon makes its appearance." "But," asked she, "when will it appear?" "It should to-morrow; and then these alarming symptoms may mitigate." Next morning papillæ were scattered over the face and limbs, the fearful symptoms abated, and she passed safely through the discreet form. Not vaccinated.

In my efforts to ascertain the history of these cases, the mother informed me that her brother, a telegraph operator, had had chicken-pox upwards of a month before, and had stayed at her house during his illness; that subsequently both her infant and herself had taken the same disease; and when the little boy took ill she thought he also had it. As he was worse than any of the others had been, she called in Dr. Thorburn, who informed her what the boy was suffering from. Dr. T. kindly turned the cases over to me. She now knew the nature of her own sickness and that of her brother, saying that some of the pustules on her own face were just like those on her children. She was vaccinated. One of her husband's brothers, who had visited the family, had also passed through a mild form of varioloid.

63. 25th Sept. Was called to attend another brother of her husband, on Mutual Street, with a severe form of varioloid. Vaccinated.

64. 6th Oct. Was summoned to visit a woman on Dorset Street, who had humanely assisted the mother of the little girl to give her a bath the day she had the convulsions, with a mild form of varioloid.

The origin of none of the thirteen cases in hospital and nine in private practice, otherwise than as already stated, could be ascertained.

The information that could be obtained from other localities is now given.

Mill Point.—Dr. J. Newton, of this village, very kindly furnishes pretty full details respecting the outbreak and progress of the disease in that locality; but, owing to the nature of this paper, I am obliged to curtail them. The first case was that of a boy who had been attending school at Ottawa. The family with which he boarded were attacked with variola, and his father took him home. The disease manifested itself in him on the 10th June, and in a brother on the 22nd. On 4th August an old lady residing in the township of Richmond, some two miles distant, exhibited the usual symptoms. She had confluent, and died on the 18th of same month. Since the last date up to the 23rd Sept., there had been four cases of varioloid, and four of the discreet form, all of whom recovered. There were also six cases of confluent, with four deaths. Altogether there were seventeen cases, with five deaths. The four varioloid patients had been vaccinated, but none of the others had.

Moravian Indian Settlement.—From Dr. Tye, Thamesville, the following particulars were obtained, his letter being of the 12th July. He had charge of the small-pox patients at the outbreak of the disease, but subsequently resigned, as he found that it injured his private practice. I have since written to Dr. Oronhytekha, who it was said had subsequently attended, but no reply has yet reached me. Therefore, what is here given has been furnished by Dr. Tye. The first case presented on the 12th May, in an Indian girl, aged 13. She was seized with vomiting, bleeding from the gums, and bloody stools. Purpura hæmorrhagica appeared. She died in 48 hours from the onset of the attack. This, from after circumstances, was doubtless a case of malignant small-pox. Three younger children, (of same family, I conclude) subsequently had small-pox, one of them dying. A squaw of 19, six months married, and three pregnant, was next seized. She aborted and died. Her husband became ill within a couple of weeks, and died; and her stepfather, who had visited her during her illness, was likewise seized, but recovered. A woman, aged 29, in the eighth month of pregnancy took ill, miscarried, and died. A squaw, aged 50, vaccinated, had varioloid. A man, aged 40, had confluent, and died the sixteenth day after appearance of disease. The *contagium* was introduced by a sub-chief, who had visited Ottawa. He had a slight attack after his return; but, as he was not very ill, no medical man saw him, and it was not known that he had had small-pox till subsequent events showed the nature of the trouble. His wife, who was six months pregnant, contracted the complaint, but of a favourable type, and did not miscarry. In all there were 42 cases among these Indians, with 16 deaths.

Sandwich.—Dr. Carney, of Windsor, supplies the following respecting the recent outbreak at Sandwich. The disease was thought to have been introduced by a family from Montreal on their way to Manitoba, to whom the railroad lines had refused passage, and who remained over at that town. Up to the date of the doctor's letter, 20th June, there had been 13 cases with five deaths, two adults and three children. The patients that were recovering had all been vaccinated, but none of those who had died had been.

Dr. Sinclair states that there was not a single case in or near the village of Melbourne, a locality in which the papers stated the disease was wide-spread.

St. Mary's.—Dr. Mathieson informed me, on the 21st June, that on the 7th June a man was taken ill of the disease, and died on the eighth day after. He had slept with a man in London, on the 24th of May, in whom the

eruption was just appearing, and who subsequently died. In the particulars given below from a letter dated 7th of July, of Mr. Whelihan, the county registrar, it will be noticed that there is some discrepancy between the statement above given and that made by him This can easily be explained by the fact mentioned in that portion of my paper read before this society on the 26th of June: that it is exceedingly difficult in cases of small-pox to obtain reliable information. Mr. W. says, that on the Queen's birth-day a man, said to be from London, with small-pox upon him, appeared on the race-course in charge of a horse: that shortly after the ostler at the hotel where this man had stopped took ill of the disease: that the book-keeper and one of the landlord's children were attacked and died: that the hotel-keeper himself and four or five others in the same house were at that time ill with the disease, the place being quarantined; and that there were four cases in different parts of the surrounding country traceable to those in the hotel.

Usborne.—The following paragraph appeared in the *Globe* of the 5th August: "The small-pox cases in Usborne are at an end. Both Mrs. Smellie and daughter are dead, and the building burned." This township adjoins that in which St. Mary's is situated on the west; and Mr. Clark, township clerk, states that these were the only cases. The girl was servant in the hotel in St. Mary's in which the disease prevailed, took it, went home, and infected her mother.

Ottawa.—Early in June I wrote to Dr. Lynn, health officer of this city, for information, the disease being epidemic there then. Not receiving any reply from him, I addressed a note to Dr. Leggo, after a lapse of more than a couple of weeks. He kindly favoured me with the following particulars on the 22nd of June: Number of cases in the Protestant hospital since the 1st of January, 24; with five deaths. None of those who died had been vaccinated. There were then 18 cases in the Roman Catholic and 12 in the Protestant hospital. There were several cases in private houses also. He thought, from all he could learn, that there had been about 80 deaths.

As the information supplied by Dr. L. was not as full as could be desired, I wrote a second and third time to Dr. Lynn, but without obtaining any response. On the 9th of August he called upon me, being on a visit to this city, and promised to give me the desired particulars in a couple of days. I accidentally met him on the street about a week after, when he said that he was about to return to Ottawa, and would mail me what was required immediately after his return home. Not hearing from him I again addressed him after a fortnight or so had transpired; and received a note from him, dated the 8th of September, some days subsequently, in which the following is given: Number of cases in hospital from the 1st of January to date, 151; outside, 135. "The rate of mortality of unvaccinated was one out of three. No deaths occurred in those showing good signs of vaccination."

This information is exceedingly meagre and unsatisfactory. It is to be regretted that nothing more reliable could be furnished; and, as Dr. L. informed me that he kept no records, what is supplied is by no means as valuable as could have been wished. It is a pity that in the Metropolitan City of our Dominion a better system of registration during such epidemics as Ottawa has so recently been subjected to, has not been adopted. With two large hospitals, and such a number of cases, there is a wide field for the observation of the most loathsome disease of our climate, in all its varied phases; and it is a sad reflection upon its authorities that no provision is made for rendering that field more fruitful in results that might prove beneficial in the prevention, checking, and curing of the malady. At this date the disease is still prevalent.

London.—Dr. Burgess, of the London Asylum, has very considerately collected the following, with relation to the disease, in and around that city:—A market-gardener, living about two miles out of town, returned on 7th October from Europe (in the same steamer as the cases 1, 4, 11 and 19, of the paper read on 26th June). A few days after his return he became unwell, and presently a slight eruption, which was thought to be chicken-pox, appeared on the face. He was not very ill, and had been vaccinated. This was, judging from what subsequently transpired, a case of simple varioloid. Twenty-seven days after his return his mother was taken ill, when it was found that she had small-pox. Then his father and two sisters were seized, the father dying. Twelve others in the city and neighbourhood were infected. In all there were 11 males, five females, and one infant, sex unknown, 17. Four of the males and one female went to the hospital. The infant, the above-mentioned female, and three males, died.

Whitby.—From Dr. Eastwood I learn that there was but one case in this town during the winter, that of a man living in the town-hall. There had been a few cases in Oshawa, just previous to his taking ill, but he had not been out of Whitby. A room in the hall was set apart for tramps, and some of those who had lodged there may have had infected articles about them and he been smitten by them. The more probable theory is, that he was indebted

to some of those of his Oshawa neighbours who had either had the complaint themselves or been in bad company, for his misfortune.

Oshawa.—Dr. Martin and Dr. Rae state that were four cases last fall, none of which were fatal, but two were confluent.

Hamilton.—Dr. J. A. Mullin states there has not been a case in two years.

Monck Road, Tp. of Digby.—First case on 25th October, 1878, in the person of a recently arrived immigrant, by same steamer as Nos. 1, 4. 11 and 19. There were four cases in all with two deaths.

Embro.—On 19th October, an immigrant by same steamer s ; often spoken of was attacked in this village, and died. From this focus the disease spread rapidly about the vicinity till thirty-four persons in the township of West Zorra were taken ill. Four of these were under 12, five between 12 and 23, three over 50, and the remainder were middle-aged. Eight were not vaccinated, and two had the disease for the second time. One pregnant woman took semi-confluent, miscarried, but recovered. Eleven died, one of whom was *said* to have been well vaccinated. For these particulars I am indebted to Dr. Adams.

Barrie.—Dr. Crookshank states the disease did not make its appearance.

Brantford.—Dr. D. L. Philip gives the following particulars relating to the outbreak of small-pox in this town, in the fall of '78. In September a merchant boarding at an hotel, who had recently been to Toronto on business, took ill with that malady, and supposed that he had contracted it in this city. This supposition could hardly have been well-founded, as there had not been a known case in Toronto for many months. A few cases occurred in Brantford in each of the months of October, November, and December. In January and February of this year nothing of the disease was seen, but it re-appeared in March and April. There were in all about 25 cases, ten being confluent; the confluent form attacking those only who had not been vaccinated. Seven patients died, none of them being known to have been vaccinated.

Cooksville.—The medical man who had charge of the small-pox patients in this village and vicinity, did not reply to the letter addressed him; but from private sources it was ascertained that in early spring there were 17 cases, with three deaths. The disease was supposed to have been introduced by a tramp.

Marmora.—Dr. Sprague, of Stirling, kindly took the trouble to obtain for me the following facts repecting the outbreak of small-pox in the village and township of Marmora and the township of Rawdon. The first attacked was a baker, in the month of February. As he had not been out of the village for a month, and it was not known that he had been in contact with any one from an infected district, it could not be learnt how he had contracted the disease. But, as small-pox is never of spontaneous origin, he must have been exposed in some way to the contagion. From this man the disease spread, and in February and March there were 22 cases, with six deaths, in the village; 7, with one death, in the township; and 13, with one death, in the adjoining township of Rawdon.

After the publication in the Journal of Medical Science of the first portion of the paper on "Small-pox in Ontario," read before this Society on the 26th June last, I received a note from Dr. Rowand, inspecting physician at Quebec, asking the name of the steamer that I had stated had brought the small-pox to that port. Of course, I immediately furnished the required information. In a subsequent note, Dr. R. thanked me for so promptly replying, and gave the following interesting information: Miss Rye brought out a number of children in the vessel. Her servant had been exposed to the contagion of small-pox a few days before sailing, and the eruption appeared during the voyage. She was then isolated, and a very pretty girl detailed to nurse her. The sailors, attracted by the nurse's beauty, assisted her, and carried on a little flirtation. The disease subsequently attacked some of the sailors; and a female passenger being ill with it on the vessel's arrival at Quebec, was sent to the Marine Hospital, where she died. All the other passengers were examined; and none of them complaining or appearing to be ill, they were passed, and went westward. The doctor performed his duty, in accordance with the law; but could not detain the steamer, as vessels carrying the mail are exempt from quarantine. This explanation is due to Dr. Rowand, and is cheerfully given.

From what has been laid before the Society, it will be seen that there have been, according to the returns, the following number of cases and deaths in the localities named, since October, 1878:—

	Cases.	Deaths.
*Ottawa	266	80
Toronto	61	12
Moravian Indians	42	16
Marmora and Rawdon	42	8
Embro and vicinity ..	35	12
Brantford	25	7

* Ottawa.—Dr. Lynn's statement of the total number of cases is most probably far below the mark. Dr. Leggo's calculation respecting the number of deaths is only a supposition, based upon the meagre information he could obtain. The disease is still prevalent in that city.

	Cases.	Deaths.
London	17	5
Cooksville	17	3
Mill Point	17	5
Sandwich	13	5
St. Mary's	13	2
Weston	4	2
Monck Road	4	2
Oshawa	4	0
Don Mount	3	0
Yorkville	2	0
Usborne	2	2
Whitby, Flesherton and Brampton, one each	3	0
Total	570	161

Thus the death-rate was nearly 28½%.

Some of my correspondents have complained of the persecution they have had to undergo, and the pecuniary loss sustained by them, because of their having attended persons ill of small-pox. I can truly sympathise with them, feeling that I have had more reason to complain in these particulars than all my professional brethren put together. If some of those gentlemen were to come to this hypergodly city, with its hundred churches, and professionally attend their unfortunate fellow-creatures who might be attacked with that horrible disease, and that fact to become known, they would soon learn to their cost that it seemed to be not only one of the commonest virtues to annoy, malign and belie them; but the most exalted of Christian duties to anathematise and persecute those whom Providence had seen fit to afflict with sickness.

Of the treatment of small-pox, but little more than what was given in the former paper need be said. Of preventive agents, vaccination stands pre-eminent. Cleanliness and non-exposure may, in a sense, be likewise said to be preventives. Of specific remedies there are none. Sulphurous acid, sulpho-carbolate of sodium, chlorate of potash, cream of tartar, sulphur, and many other drugs, have had their advocates; and I was once strongly urged by a medical brother to send $5 to some nuns somewhere in the States for a bundle of herbs vaunted by them as, and believed by him to be, a positive specific. Not having as much faith as my confrere in Colonel Lane's specific for small-pox, sold by the pious sisters of ——, I did not invest in that nun-such remedy, and can scarcely think that either my patients or myself have been much the losers. The old treatment of low diet, bleeding, antiphlogistics, and close, suffocating rooms, in this disease, is entirely superseded by a more humane and rational system. Pure air; cleanliness; such nourishing food as the patients can take, an abundance of good milk; warm baths; watching the more dangerous symptoms, and combatting them with suitable medicines; warm, well-ventilated rooms in winter, and cool ones in summer, with bedclothes adapted to the season; plenty of fresh, cold water for drinking; enemas in constipation, where purgatives are not likely to be well borne; the eyes protected from glaring light; and whatever drugs are given rendered even to the poorest as palatable as possible, is the best that can be done. Any practitioner pursuing the course here indicated, addressing kind and encouraging words to his patients, and letting them see that he "has a heart that can feel for another," will not have fallen far short of performing his duty.

EXTENSIVE WOUND OF ABDOMINAL PARIETES AND INTESTINE.—RECOVERY.

BY A. C. SLOANE, M.D., ANNAN.

(We must apologise to Dr. Sloane for having made an abstract of his interesting communication, but the exigencies of space required us to do so.)

Mr. H. C., aged 54, and his son were out chopping; the son's axehead being loose flew off striking Mr. C. in the abdomen. Dr. Sloane being some miles distant did not see the patient for an hour and a-half after the accident. He then found him lying where he fell, the body covered with a cold clammy perspiration, the radial pulse imperceptible, and the lips of a dark colour. A wound was found in the abdomen, and at the side lay a pool of blood mixed with feces; through the wound the bowels protruded. After the administration of some brandy, which appeared to revive the patient, the doctor proceeded to examine the wound. "A large clot partly filled the opening; this I removed, and near the inner angle of the wound was found an artery bleeding freely, which was secured with a ligature. * * * I then examined the protruding bowels carefully, and found a transverse section in the descending colon cutting through about half its circumference; through this opening I removed all the feces I could reach, and then brought the edges of the wound together, these being held by an assistant while I stitched them with the continued suture, making sure that the proper parts were in

close apposition." During the manipulation of the bowel the patient complained of sickness and a strong desire to vomit. "I cleaned the bowels as well as I could without using any water or cloth, and then pressed them back within the abdominal cavity, and on doing so observed that a quantity of blood gushed out; having satisfied myself that there was more in the abdominal cavity, I had some of the bystanders roll him on his side while I pressed the bowels back and lifted them up a little, bringing the most unclean parts of the bowel in contact with the flow of blood. I next laid him on his back, restored the bowels to their place, brought the edges of the external wound together, put a number of stitches in, washed it and put on strips of adhesive plaster, then soaked a piece of cotton in oil mixed with carbolic acid, and laid it on over all." After careful removal home on a door, iced water clothes were also applied and directed to be changed every five minutes. "I gave him small doses of pulv. opii to keep the bowels perfectly quiet, and allowed only liquid drinks for nourishment." The powders were continued for nine days. On the mornings of the 8th, 9th and 10th days 2 oz. of warm milk and water were thrown into the bowel, and on the 11th a small dose of castor oil was administered and produced one or two evacuations. More solid food was then allowed, and about the 16th or 17th day the cold applications were discontinued. "When pillowed up in bed sufficient external pressure was used to prevent bulging at the wound, and when he began to walk this was continued until the part was quite strong again." He made a perfect recovery. The dimensions of the scar are as follows: Situated "about 3½ inches below the navel, and two inches above the pubic arch the inner end of the wound crossed the median line about ½ an inch, and extended outwards about five inches leaving the outer end a little the higher, and about 1½ inch above the crest of the ilium."

Canthardin has been prepared from the fresh powder of the potato beetle, which yields about one and a third per cent.

To the Editor of the Canadian Journal of Medical Science.

DIPHTHERIA.

Having noticed by accounts from Canadian papers that diphtheria is very prevalent, and, to a large extent, fatal in Canada, I send you the formula that I have used since 1858. I have never lost a patient from diphtheria.

J. D. Frickelton, M.D.,

Fort Yale, British Columbia, Oct. 15, 1879.

FOR DIPHTHERIA.

℞ Potass. chlorat..... ℥j.
Acid hychochloric dil..... ℥ij.
Tincture ferri muriat ..... ℥iij.
Aqua distill ..... ℥xij.

Dissolve the chlorate of potassa well, mix and filter.

Dose, a teaspoonful every three hours, no fluid to be taken within fifteen minutes after. In very severe cases I use one part tinct. ferri and two parts of the above to swab the tonsils and throat until the patient can speak. If the fever is very high I add a few drops tincture aconite to each dose.

Translations.

Hæmatinuria or Hæmosperinuria (Hæmoglobinuria) from the use of Quinine.

In the session of 18th Nov., 1878, of the Medical Society of Athens, Dr. Caramitsas, of the chair of special Nosology, read a memoir upon the subject expressed by the above caption, of which the following are the conclusions:—

1. Quinine has provoked a hæmosperinuria (hæmoglobinuria) sometimes attended by a febrile paroxysm, totally independent of malarial hæmaturic fever.

2. This hæmatinuria is provoked even by small doses of quinine.

3. Quinine is not only contra-indicated in cases of this diathesis, but is even decidedly prejudicial, and often dangerous; so that it is proper to interrupt the use of the quinine immediately on the occurrence of this hæmatinuria.

In all the seven cases observed by Caramitsas, the urine contained no blood corpuscles, but merely the colouring matter of the blood. (Galenos, num. 1.)—*Revista de Medicina Y. Cirugia Prácticas, Madrid.*

THE CANADIAN
Journal of Medical Science,
A Monthly Journal of British and Foreign Medical Science, Criticism, and News.

TO CORRESPONDENTS.—*We shall be glad to receive from our friends everywhere, current medical news of general interest. Secretaries of County or Territorial medical associations will oblige by sending reports of the proceedings of their Associations to the corresponding editor.*

TORONTO, DECEMBER, 1879.

TORONTO SCHOOL OF MEDICINE ANNUAL DINNER.

The sixth annual dinner of the Toronto School of Medicine took place at the Rossin House, Toronto, on November 13th, and, as usual, was largely attended by graduates, students and guests.

Mr. W. J. Cross, student, occupied the chair, and around him were seated, among others, Rev. Dr. Nelles (Victoria College), Mr. Goldwin Smith, Mr. Mayor Beaty, Prof. Croft, Prof. Ramsay Wright, Dr. Geikie (Trinity Medical School), Rev. Dr. Potts, Dr. Strange, M.P., Dr. Workman, Mr. Howells (United States Consul), and Dr. Macdonald (Hamilton). The faculty of the School was represented by Dr. Aikins, Dr. H. H. Wright, Dr. U. Ogden, Dr. Richardson, Dr. Thorburn, Dr. W. W. Ogden, Dr. George Wright, Dr. McFarlane, Dr. Oldright, Dr. F. H. Wright, Dr. Reeve, Dr. Graham, Dr. Zimmerman, Mr. Thomas Heys, and Mr. H. Montgomery. Among other medical gentlemen present were Dr. O'Reilly (General Hospital), Dr. Clark (Insane Asylum), Dr. King, Dr. Burns, Dr. Riddel, Dr. James Ross, Dr. McConnell (Thornhill), Dr. McLaughlin, M. P. P., Dr. Ray (Oshawa), and others. Mr. G. T. Duncan and Mr. B. B. Anderson acted as vice-chairmen.

The Secretary, Mr. Lewis E. Shepherd, announced that he had received letters of regret at not being able to be present from several prominent gentlemen, and read the following telegram from the students of Queen's College, Kingston, amid loud applause :—

"The students of the Royal College, imbued with that fraternal feeling which characterizes the generous medical student the world over, extend the right hand of fellowship to their brothers in Toronto. The position taken by the Canadian medical student at home and abroad affords reason for wide and sincere congratulation. May that spirit of generous rivalry for excellence in our profession continue to characterize our schools; and may the lustre of their reputation be untarnished by anything having even the semblance of dishonour!"

Mr. Irish, "mine host," of course was equal to the occasion, and had prepared a dinner which was indeed *comme il faut*.

The CHAIRMAN, in entering upon the list of toasts, said the Toronto School of Medicine had reason to feel proud of the success attending this their sixth annual dinner, and he rejoiced to see the faculty, graduates, and students brought together under such festive circumstances. He noted the recent improvements in the school, and the general advancement in its ways and methods of teaching, and assured the members of the faculty of the high esteem and admiration in which they were held by the students. The first toast was, of course, "The Queen," which was honoured amid cheers and the singing of the National Anthem. "The Governor-General and Lieutenant-Governor" having been heartily drunk, the Chairman proposed "The Active Militia," which brought Dr. Thorburn to his feet in reply. The marital doctor made a few very appropriate observations in reference to our volunteers, and thanked the company for their kind remembrance of them. Following came the toast of "The Dominion and Local Governments," coupled with the names of Dr. Strange, M.P., and Dr. McLaughlin, M.P.P.

Dr. Strange replied, and in the course of his remarks referred to the honourable positions that some members of the profession in Canada had obtained in the political arena. Dr. Tupper had become Sir Charles Tupper, and a member of the Dominion Government. Dr. Robitaille had been made Lieut.-Governor of Quebec, and Dr. Blanchet had been elected Speaker of the Commons. Dr. Strange advocated the registration in Ontario of all who, by virtue of British qualifications, held a license to practise in any part of Her Majesty's dominions, but also expressed himself in favour of reciprocity in this

matter. Dr. McLaughlin, M.P.P., also replied to the toast in suitable terms, advocating the right of Canadians to legislate for themselves in matters medical, and strenuously opposing the registration of British qualifications, so long as these qualifications did not represent in every branch an equivalent of knowledge to Ontario qualifications, and so long as reciprocity was not granted. The Mayor of Toronto answered for the toast of "The Mayor and Corporation" in his usual happy manner. To the toast of "University of Toronto and University of Victoria," Prof. Croft, Dr. J. H. Richardson, and Rev. Dr. Nelles replied. Prof. Croft referred to his long and pleasant connection with the Toronto School of Medicine, spoke of the early history of the University of Toronto (then King's College), and said that the occasion was probably the last of many opportunities he had enjoyed of addressing the students and friends of the Toronto School of Medicine. He hoped that the Government, in filling the vacancies caused by the retirement of Dr. McCaul and himself, would choose men renowned for their ability, learning, and scientific attainments, without any regard to nationality, politics, or creed. Dr. J. H. Richardson gave reminiscences of medical teaching in Toronto when he was the first matriculated student of King's College. Dr. Nelles congratulated the school on its success and prosperity, and referred to the gratifying position that Victoria College occupied, and to the benefits accruing from a theological training. His remarks were received with applause. He spoke of the advantages of the existence of two rival medical schools in the same city, as tending to stimulate them mutually to excel, and hoped that the rivalry would always be generous and healthy. Prof. Goldwin Smith was the first to respond to the toast of "Sister Institutions," and did so in his usual happy manner. He was followed by Dr. Geikie, the worthy Dean of Trinity Medical School, whose name was received with hearty and prolonged applause. Dr. Geikie thanked the company heartily for the compliment paid to Trinity Medical School in extending to their representative its hospitality, and for the cordial greeting that the toast had received. He trusted and indeed felt sure that the schools were animated by the feeling to in every way heartily co-operate in their duties of educating the medical students of Ontario, and spoke earnestly of the warm and friendly feeling with which those connected with the schools, both as teachers and students, should be mutually animated. Dr. W. T. Aikins and Dr. H. H. Wright replied to the toast of "The Toronto School of Medicine," referring to the history of the school in the past, the bright future that awaited it, and the duty of the Government towards it, and through it and other schools to the public at large. Dr. Aikins hoped that the Government would make the Toronto Hospital a free institution, and increase the facilities afforded for clinical teaching and study. Dr. Macdonald, of Hamilton, the president of the College of Physicians and Surgeons of Ontario, and Dr. Ross, the member for Midland and York, replied for "The Ontario Medical Council," and referred to the work of that body in the past and its intentions for the future, stating that the interests of the profession and the public in Ontario would be their care, and that it was their intention to carefully guard their rights and privileges in medical education and registration. Drs. McConnell, of Thornhill, and Riddell, of Toronto, responded for "The Graduates." Mr. J. Anderson spoke for "The Graduating Class." The Press, the Ladies, and the Freshmen were duly honoured, and the company separated at an early hour in the morning, having thoroughly enjoyed the hospitality of the students of the Toronto School of Medicine. During the evening, at intervals, Messrs. Christie, Miller, Duncan, Lesslie, Anderson, Meenie and others entertained the company with music and recitations.

THE ONTARIO MEDICAL COUNCIL AND BRITISH QUALIFICATIONS.

We are informed that, notwithstanding the fact that the Executive Committee of the Council last year felt themselves compelled to register a British graduate without examination, it is the intention hereafter to refuse to recognize this case as a precedent, and to compel all seeking registration to show that they have complied with the requirements of the Ontario Medical Act. Now that the Local and Dominion Govern-

ments begin to recognize the fact that if British legislation in medical matters is to control Colonial Legislation, the same rule may be applied to our legislative enactments as to admission to the legal and other professions, active measures will probably be taken to finally confirm us in the right we claim to compel every one seeking registration to conform to the provisions of the Ontario Medical Act. We congratulate the Executive Committee on the stand they have taken, and trust that they will maintain their rights. It is high time that the Ontario Medical Council should show that its function is to act and not to merely exist, not only in this matter but in many others. We hope to see also that, in accordance with their promises, the annual assessment will next year be *impartially* levied, for in the past it has been almost a dead letter.

Book Notices.

Perizia Sullo Stato di Mente di Passanante dei Professori Tommasi, Verga, Biffi, Buonoma, Tamburino (Relatore Tamburini), Reggio-Emilia, 1879.

Proceedings of the Louisiana State Medical Association at its Second Annual Meeting, 1879, with the Constitution and By-Laws. New Orleans, 1879.

Tobacco-Poisoning and its Effects upon the Eyesight. By A. W. Calhoun, M. D., Atlanta, Ga. From Transactions of Medical Association of Georgia.

The Treatment of Fracture of the lower end of the Radius. By R. J. Levis, M. D. From the Transactions of the Medical Society of the State of Pennsylvania.

Dominion of Canada—Manitoba and the North-West. Facts and Information for Settlers, with a map of the country. Montreal, 1879.

Atlas of Skin Diseases. By Louis A. Duhring, M. D. Part VI. Philadelphia: J. B. Lippincott & Co., 1879.

This part contains plates of Syphiloderma (pustulosum), Erythema Nodosum, Seborrhœa and Eczema (papulosum), accompained by the usual explanatory text of each case. The high standard that has characterized the preceding parts of this Atlas is maintained in Part vi., which is excellent in every way.

American Health Primers: Eyesight and How to Care for it. By George C. Harlan, M.D. Philadelphia: Lindsay & Blakiston. Toronto: Hart & Rawlinson.

In this volume of the series published by Lindsay & Blakiston, the author tells the laity nearly all they should know about the eye. The anatomy of the organ and the physiology of vision are plainly and concisely described; and timely hints are given in regard to injuries and diseases of the eye, and the care of the eyes, and also in regard to the injurious tendency of modern school-life upon the sight. The important subject of optical defects and their correction is well explained; and altogether quite a fund of valuable information is provided, which it is to be hoped the public will duly appreciate.

Long Life and How to Reach it. By J. G. Richardson, M. D. Vol. II. American Health Primers. Philadelphia: Lindsay & Blakiston. Toronto: Hart & Rawlinson.

This little work is pleasantly written, and will prove interesting and useful to the profession as well as the general public. It takes up the causes of disease, such as excessive heat and cold, contagion, impure air, improper food, loss of sleep, parasites, etc.; and teaches us how to avoid them. It also gives excellent hints about suitable clothing, different kinds of baths, the various points to be considered in building our dwelling-houses, and proper ways of taking muscular exercise. The author concludes with a chapter on "Old Age and How to Meet it," giving valuable instructions to those whose vital powers an growing weak from this cause.

Memorial Oration in honour of Ephraim McDowell, "The Father of Ovariotomy." By Samuel D. Gross, M.D., LL.D, D.C.L., Oxon. Louisville, Kentucky, Printed by John P. Morton & Co., 1879.

We acknowledge with many thanks, to the

State Medical Society, the receipt of the Memorial Oration delivered by Dr. Gross, at Danville, Ky., at the dedication of the monument erected to the memory of Dr. Ephraim McDowell, by the Kentucky State Medical Society, May 14th, 1879. A well executed engraving of Dr. McDowell serves as frontispiece to the book. The oration is worthy of its eminent author and his subject; the man who so successfully advocated McDowell's claims as the first to perform the operation of ovariotomy, was well chosen to give an address on the occasion of the dedication of a monument to the memory of one who has been so grand a benefactor of the human race.

The Student's Guide to the Diseases of Women. By ALFRED LEWIS GALABIN, M.A., M.D., F.R.C.P., Assistant Obstetric Physician and Joint Lecturer on Obstetric Medicine to Guy's Hospital; Examiner in Physiology and in Obstetric Medicine to the University of Cambridge, &c., 1879. Philadelphia: Lindsay & Blakiston. Toronto: Hart & Rawlinson.

Referring to this little book of 370 pages, a friend remarked, "What's the use of that while we have Atthill?" and we also felt that the author was entering on a dangerous competion; but after carefully reading it through, we can safely advise our readers to go and do likewise. It does not embrace all the diseases and operations found in the larger works of Emmett and Thomas, but it does treat of a large proportion of the diseases of women met with in every-day practice, and the matter is so concise that the reader can easily comprehend the whole subject under discussion.

Chapter 1, on Physical Diagnosis, is very practical, and fully describes all the instruments usually required and the methods of using them in diagnosis; but we think the author is not emphatic enough in speaking of the danger of rapid dilatation of the urethra for the purpose of exploring the bladder. Indeed we think the practice should only be resorted to in cases of extreme urgency, and then with the full conviction that, however much care is observed, permanent incontinence of urine may follow. In chapter 2, on the Physiology of Normal Menstruation, he gives the modern views of Tyler Smith and John Williams as to disintegration and exfoliation of the mucous membrane, although he does not appear to fully accept them himself. In chapter 3, on Malformation of the Uterus and Vagina, while he refers to Emmett's plan of free opening and washing out the cavity of the uterus in cases of retention, he evidently prefers the old plan of very gradual evacuation; but we cannot dwell on these points. We find a great deal more to praise than to find fault with, in the book as a whole. It is very much like Atthill, and quite as good; and although we differ in a few points, we like it quite as well as that of the Dublin professor.

We heartily commend it to our readers as a faithful summary of the more common diseases of women, and a safe and practical guide to their treatment.

Clinical Medicine; A Systematic Treatise on the Diagnosis and Treatment of Diseases. By AUSTIN FLINT, M. D. Philadelphia: Henry C. Lea, 1879, Toronto: Hart & Rawlinson.

Prof. Flint introduces this his more recent work, to the profession by defining "clinical medicine" as being strictly the study of cases of disease, and as referring to two ends—diagnosis and treatment. The range of clinical medicine, he tells us, is not restricted exclusively within the limits of purely medical science; and in the work before us he proposes to furnish the practitioner and student with a guide to the investigation of disease, with reference to the two special objects stated above.

The plan of the work is, in the introduction, to devote attention to some general considerations; the work is then divided into sections corresponding to the divisions into which diseases are distributed, in accordance with the nosological arrangement generally adopted in the United States. Each section is prefaced with the symptomatology and the methods of examination relating to the diseases considered in that section He gives directions under special headings for examining a patient, and expresses the opinion that the physician at the threshold of pro-

fessional life cannot be urged too strongly to begin at once to make daily records of important cases. Under the heading "Simulation of Disease," Prof. Flint thinks that decision should be reserved when there is reasonable ground for doubt; for he has known, as have others, sudden and fatal terminations when patients have been discharged from hospitals as malingerers.

There is much valuable information in the work, which, simply for purposes of diagnosis and suggestions as to treatment extends to a goodly-sized volume of 785 pages. Had some of the sections been reduced in their proportions and the space so gained been devoted to etiology, morbid anatomy and general and special pathology the result aimed at would have been attained, and the association of symptoms and signs, with cause and effect, secured.

It is a little doubtful if the present volume will add to Prof. Flint's reputation as an author or a teacher; it is furthermore doubtful if works of this class are well qualified, with the omissions above alluded to, to make the student a good practitioner, or better qualify the physician for professional practice, as relates to diagnosis and treatment.

Treatment of Tape-worm by Salicylic Acid.—Dr. Ridder reports two cases in which he gave salicylic acid to remove tape-worms, with the most satisfactory results. The mode of administration was as follows: An ounce of castor-oil was given in the morning, and the patient's diet was restricted during the day, so as to keep the intestinal canal as empty as possible. On the following morning half an ounce of castor-oil was given at 7 o'clock; at 8 o'clock 12 grs. of salicylic acid was given, and this dose was repeated every hour until a drachm of the acid had been taken; half an hour after the last dose, another half-ounce of castor-oil was administered. In one of the cases the worm was passed about 1 P.M., and in the other about 3 P.M.; both were examples of the tænia solium, and both were passed entire, with the head. After the passage of the worms the rectum was washed out with injections of water. The only unpleasant effect produced by the treatment was a slight nausea, which was not, however, bad enough to keep the patients from returning to work on the same afternoon.—*Allg. Med. Cent. Zeit.*

Miscellaneous.

Aloin hypodermically in solution of one part to twenty-five of very warm water produces the same purgative effect as when taken internally.

The veteran lecturer, Prof. Chevreul, has commenced his annual course on organic chemistry at Paris, although in his ninety-third year.

Mr. G. W. Callender, F.R.S., of St. Bartholomew's Hospital, London, died on Oct. 27th. Mr. A. H. Garrod, F.R.S., and Dr. Leared, F.R.C.P., died in October last.

Aconite Poisoning.—A case is reported in which three teaspoonfuls of the tincture of the root were taken. Recovery followed the use of tincture of digitalis, four hypodermic injections of 15 minims each being given.

Lactopeptine.—This preparation, which is composed of pepsin, pancreatine, diatase (or vegetable ptyalin) lactic, and hydrochloric acid, and sugar of milk, has already acquired an enviable reputation, both in this country and abroad, in the treatment of many forms of dyspepsia, and in the digestive troubles in children. We have used it in a number of cases of marasmus, and it has been invariably followed by good results.—*National Medical Review*, March, 1879, Washington, D. C.

Ocinum Basilicum, a New Anthelmintic.—This plant, which is known in Buenos Ayres under the name *albahaca*, exerts a powerful action on intestinal worms, expelling them from their haunts with very great rapidity. The part used is the juice, and it is given in doses of about two ounces, followed in two hours by castor-oil. It acts more powerfully and certainly as a vermifuge than calomel, santonin, kousso, or kamala, and, on the other hand, posseses the great advantage of doing no harm if worms be not present, exerting then merely an aperient and disinfectant action.—*Allg. Med. Cent. Zeit.*

M. Maas, of Fribourg, has made a series of researches on the absorbing power of wounds, and the results which he has arrived at are partly opposed to the opinion admitted up to the present. A wound cauterized with the hot iron, nitrate of silver or nitric acid, absorbs like an intact wound: the absorption is much more rapid if the wound has been in contact with carbolic acid, as in Lister's dressing; it is nil in cases of cauterization with chlorate of zinc. In wounds treated openly, a crust is formed which at the end of six hours is impermeable: it becomes so only at the end of three days if the wound has previously been covered over with a wet dressing.—*Le Prog. Med.*

Signs of Death by Drowning.—MM. Bergeron and Montano (*Annal. d' Hygiene,*) have arrived at the following conclusions on the subject of death by drowning: 1. The presence of frothy foam, not only in the pharynx and the larynx, but also in the bronchi, is the constant sign of death by submersion, whether syncope or asphyxia predominated in the mode of death, and whether the individual was free in his movements or was thrown into the water after having been made insensible by opium or chloroform, or was partly suffocated, or was fettered in his action. This absolute constancy of the presence of foam, whatever the special condition in which the submersion occurred, is, in the opinion of the authors, the single sure uniform sign proving death by drowning. 2. There is always a certain degree of congestion, and sometimes subpleural ecchymoses are seen; but these ecchymoses, which give the lungs a spotted or speckled look, are unlike the punctate ecchymoses of suffocation. 3. The intensity of the hyperæmia, and the extent of the ecchymoses, are always in proportion to the efforts of the animal while struggling against submersion. It is the same also with the human subject, as has been verified in all necropsies made by the authors at the morgue in Paris during the last ten years. This fact permits one at a necropsy to learn concerning what passed in the last moments of life, to know whether or not the individual struggled long and vigorously during the act of drowning.—*British Medical Journal.*

Chlorate of Potash in the Hæmorrhagic Diathesis—By A. Harkin, M.D., Belfast.—Chlorate of potash, which is prescribed by the profession for a variety of diseases—such as scarlatina, throat-affections, low fevers, blood-poisoning, etc.—has qualities deserving a much wider application; and will yet, in the opinion of the writer, founded on extensive experience, be recognised as a potent remedy in the treatment of maladies depending on suboxidation, or defective nutrition, secretion, excretion, aeration, and molecular metamorphosis. Being mainly composed of oxygen and potassium, each of which is essential to the genesis of healthy blood, its chemical properties commend it to our consideration. In the hæmorrhagic diathesis, which is characterised by a diminished proportion of fibrin, a soft clot, an absence of the buffy coat, accompanied with a delicacy of structure in the capillaries and minute vessels, a remedy is required that shall increase the fibrin, add to the plasticity and chemico-vital elements of the blood and restore its coagulating power, as well as the contractile action of the capillaries; and thus destroy the dyscrasies, in which a slight wound may lead to excessive hæmorrhage, a trifling contusion to extensive extravasation. That this salt, whether given alone or in combination with iron, possesses the very desirable property of controlling the various developments of the hæmorrhagic diathesis, and that its persevering administration will neutralise the constitutional taint on which these ailments depend, Dr. Harkin hoped to establish by the relation of satisfactory cases, selected from an experience of its value extending over more than twenty years' observation. He generally ordered the medicine in the form one ounce of a saturated solution three times daily—one ounce of the salt to a pint of water; and, if iron be required, an addition of one drachm of the muriatic tincture to the solution completes the mixture. Administered in this proportion, Dr. Harkin had had the greatest satisfaction in the treatment of epistaxis; in hæmophilia; in hæmorrhage from the bowels, from the kidneys, from the lungs, from the stomach; in menorrhagia; in scurvy; and in purpura hæmorrhagica.—*British Medical Journal.*

On Condition of the Eye in Sleep and Disease.—The eyes have during sleep a position of equilibrium with a parallel drawn in the direction of the axis of vision; in going to sleep, however, they roll, or if disturbed during sleep by raising the lids, they converge upwards. Swinging and diverging movements of the eyeballs are only to be observed in adults during an abnormally deep sleep, and they are therefore to be regarded as proofs of a soporific condition. The pupils during a quiet and deep sleep contract to the size of a pin's head, but every stimulus which lessens the depth of the sleep without causing awakening, leads to a dilatation of the pupil, which occurs rapidly, but only slowly diminishes if the sleep is continued. The conditions are the same in the narcosis of chloroform and in the sleep produced by chloral; the deeper the soporific condition, however, with contracted pupils, the less is their reaction to a stimulus, and in the deepest stages the pupils may wholly fail to react to any stimulus. The cornea during sleep is covered with a viscid fluid, and the conjunctiva is slightly injected. This phenomenon is, according to Dr. Sander, dependent upon the sleeping condition of the brain, which causes an alteration in the secretion. In addition to these symptoms, the upper lid falls during sleep, the space between the lids becomes smaller, the eyeball is retracted, and loses something of its tension. If it be concluded that in the waking state the pupil dilates when it is covered by the eyelid, whilst it is seen that they contract during sleep in spite of this fact, the phenomenon can only be explained, according to Dr. Sander, by supposing that a stimulus acts during sleep upon the central nervous system. Although a satisfactory explanation of these facts is still required, we must at present be contented with the supposition that the state of the psychic organ has a direct and immediate effect upon certain appearances noticed in the eyeball. The condition of the eyes in pathological states is then considered. In the eyes of the dying whose skin is often covered with a clammy sweat, there is a lustreless look. The same loss of brilliancy is to be observed in patients suffering from acute delirium, in whom the saliva is viscid and is present in large quantities. So long as the pupils remain dilated the brain is not to be looked upon as in a condition of sleep, at any rate so far as the pupils are concerned. In nervous diseases the difference in the pupil are chiefly observed in paralytics, but it is often difficult to decide whether the affected side is that on which the pupil is contracted or not. One often sees during the waking condition that upon the same side as the pupil is contracted there is a narrowing of the interval between the lids; but quite a different relation is observed during the sleep of such patients. Occasionally no difference in the pupils is observed, or they contract during sleep very slightly or not at all; whilst pupils which are dilated during the waking state continue to be so during sleep, the pupil of the opposite side contracting as usual. A difference occurred during sleep in two cases of paralysis, which was not observable during the waking state. It is finally interesting to observe that the pupils in patients affected with paralysis diverge more frequently from the normal during sleep, than they show variations from the contraction which usually occurs from accommodation, convergence, or the influence of light.—*Arch. f. Psych.* ix. p. 129, *Ceutralblatt f. die Med. Wiss.*, 1879.—*Cincinnati Lancet and Clinic.*

Pills for Whooping Cough—(Bouchet).—

Pulverised Belladonna . . 1 gramme (15 grs.)
Oxide of zinc . . . . . 1 gramme (do.)
Extract of wild thyme . . 2 grammes (3ss.)
Mix and divide into 40 pills.

From one to six per day.—*L'Union Méd.*

Births, Marriages, and Deaths.

MARRIED.

On October 29th, Thomas Workman, Ottawa, son of Joseph Workman, M.D., Toronto, to Lillie, second daughter of L. Van Camp, Esq., of Berlin.

At Ancaster, on Oct. 23rd, Milton McCrimmon, M. D., to Margaret E., eldest daughter of William Temple.

On the 21st October, 1879, by the Rev. I. Tovell, at the residence of the bride's brother, U. Ogden, M.D., Toronto, Mr. Robert Armstrong, formerly of Milton, now of Montreal, to Millie E. Ogden.

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